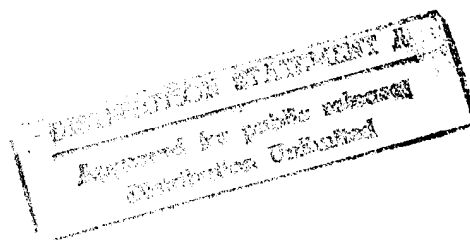


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A. ORIGINATING AGENCY NAVAL POSTGRADUATE SCHOOL, MONTEREY, CA 93943		
B. REPORT TITLE AND/OR NUMBER Analysis of contract modifications on mil cons (MILCON) proj admin by the U.S Naval		
C. MONITOR REPORT NUMBER ARELLANO, Hector A Jrl, Thesis, U-TX Dec 95		
D. PREPARED UNDER CONTRACT NUMBER NOO 123-89-G-0531		
2. DISTRIBUTION STATEMENT  APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED		

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ANALYSIS OF CONTRACT MODIFICATIONS ON MILITARY  
CONSTRUCTION (MILCON) PROJECTS ADMINISTERED  
BY THE U.S. NAVAL FACILITIES  
ENGINEERING COMMAND

by

Hector Armando Arellano, Jr., B.S.

THESIS

Presented to the Faculty of the Graduate School of  
The University of Texas  
in Partial Fulfillment  
of the Requirements  
for the Degree of

MASTER OF SCIENCE IN ENGINEERING

The University of Texas at Austin


DECEMBER 1995

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BY THE U.S. NAVAL FACILITIES  
ENGINEERING COMMAND

APPROVED BY:

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## ABSTRACT

### ANALYSIS OF CONTRACT MODIFICATIONS ON MILITARY CONSTRUCTION (MILCON) PROJECTS ADMINISTERED BY THE U.S. NAVAL FACILITIES ENGINEERING COMMAND

by

Hector Armando Arellano Jr., M.S.E.

The University of Texas at Austin, 1995

SUPERVISOR: Calin M. Popescu

This thesis analyzes the contract modifications on 135 Military Construction (MILCON) projects administered by the U.S. Naval Facilities Engineering Command (NAVFAC). Data for this study came from projects from 9 of the 10 Engineering Field Divisions (EFD's)/Engineering Field Activities (EFA's) that make-up the NAVFAC organization. Based on the results of the analysis observations were made regarding the performance of the EFD/EFA's in major areas such as claims, value engineering, scope changes and A-E liability modifications. Major differences between the performance of the individual EFD/EFA's and NAVFAC as a whole are also addressed. Lastly, the relationship between the Facility Category Code of the proposed structure or building and the project's modification rate is analyzed. The criteria used for the comparative analysis of the EFD/EFA's was: modification reason code assigned, trade affected by the modification, modification cost and the project's modification rate. Findings and conclusions are presented based on the results of the analysis.

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## Chapter 1

### Introduction

#### 1.1 Purpose.

This thesis has a dual purpose. First, an analysis of the contract modifications issued on 15 contracts from each of the 9 EFD/EFA's will be performed. Second, this thesis will attempt to establish a relationship between the Facility Category Code assigned to a project and the project's modification rate. For this analysis data from 135 Military Construction (MILCON) projects administered by the U.S. Naval Facilities Engineering Command (NAVFAC) will be used. The projects utilized for the analysis were at a stage of completion of 95% or greater at the time of the study.

The value of this thesis is two-fold. First it will show the most common types of modifications, by reason code and trade involved, issued by each of the EFD/EFA's for contracts under their administration. Major areas such as claims, value engineering, scope changes and A-E liability modifications will be given special attention. In addition, the impact the facility category code, or type of facility, assigned to the project has on the project's modification rate will be discussed. The data presented here should be useful to the Navy to identify trends and address areas to possibly minimize the number of modifications issued at the various EFD/EFA's, and therefore reduce the overall cost of a project. In addition by understanding the relationship between the facility category codes and the project's modification rate, the Navy will be better able to budget for contingency costs by taking into account the type of facility to be constructed.

## 1.2 Scope.

This thesis will analyze the contract modifications of 135 MILCON projects administered by NAVFAC. A total of 15 projects from each one of the 9 EFD/EFA's were used for this analysis. All of the projects were randomly selected and were, at the time of the study, at a stage of completion of 95% or greater. The projects selected for this analysis were, in the most part, located in the continental U.S. but a few projects in overseas locations were also included. The data gathered will be used to analyze the individual performance of each EFD/EFA's in the area of contract modifications. With this analysis completed, major differences between the EFD/EFA's will be addressed and their individual performances will be compared to the performance of NAVFAC as a whole. Lastly, this thesis will attempt to establish a relationship between the Facility Category Codes assigned to the project and the project's modification rate.

The criteria used for the analysis of the EFD/EFA's was: the modification reason codes assigned, trade affected by the modification, cost of modification and the project's modification rate. The Navy utilizes Facility Category Codes, refer to Appendix A for an explanation of these codes, to describe the uses of their facilities. These codes will be used to determine the type of facility being built and then the impact a certain type of facility has on the project's modification rate. The modification rate, expressed as a percentage, is calculated by adding the cost of all the modifications issued to date and dividing this total by the cost of the project.

## Chapter 2

### The Navy and its Organization

#### 2.1 Background.

The Naval Facilities Engineering Command (NAVFAC) is responsible for the Navy's facilities and its large capital improvement plant. Figure 2.1 shows where NAVFAC fits within the Navy's organization.

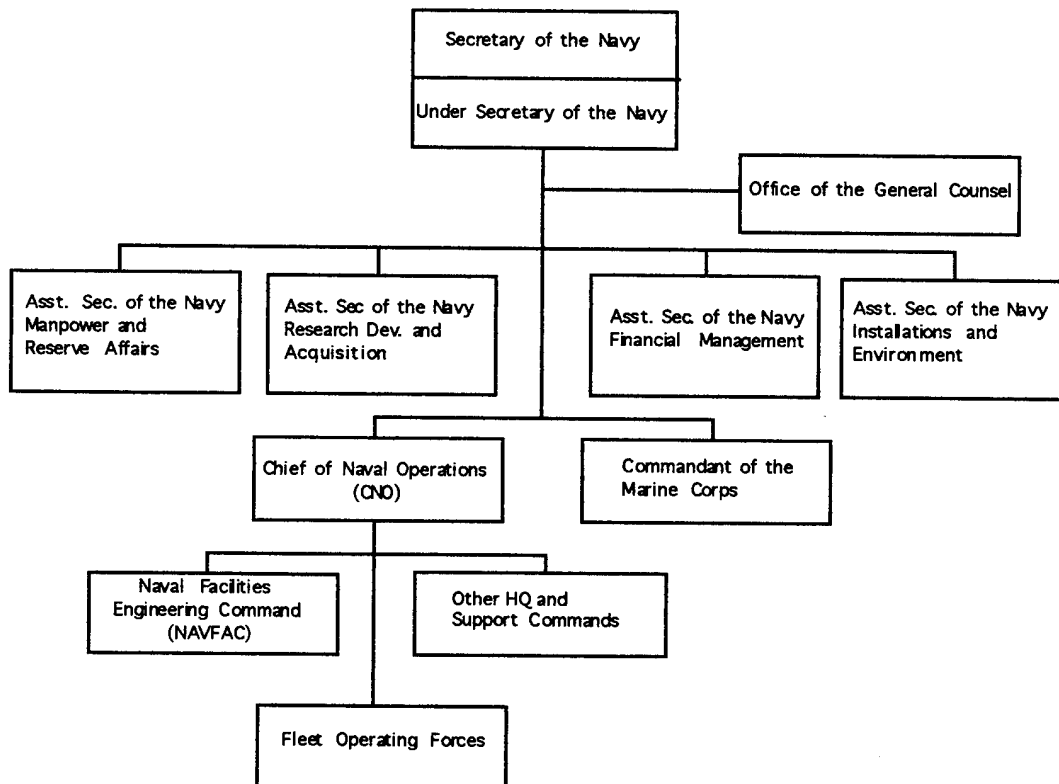


Figure 2.1: Organization of the Department of the Navy

NAVFAC manages the planning, design and construction of facilities for U.S. Navy activities around the world. The Navy's \$300+ billion worldwide physical plant includes all types of

facilities such as operational, maintenance, administrative, logistics, communications, and etc. Since NAVFAC is responsible for the physical plant they are engaged in virtually every type of construction, including industrial, commercial and residential.

NAVFAC awards more than 15,000 contracts yearly. At any given time, the command has more than 23,000 contracts active. Under the general guidance of the Office of the Secretary of Defense, NAVFAC executes a substantial portion of the worldwide Defense Military Construction Program. With rare exceptions, NAVFAC contracts are awarded and administered by the Engineering Field Divisions (EFD's), Engineering Field Activities (EFA's) or other field offices, rather than by NAVFAC headquarters.

To be able to meet the changing mission of the Navy, and to replace old and inefficient facilities, the Navy, like every other large owner, has an extensive Capital Improvement Program (CIP). This program is called the Military Construction Program (MILCON) and typically involves approximately \$2 billion per year. These contracts will typically be fixed price, competitively bid contracts awarded to private businesses.

## 2.2 NAVFAC's Organization.

NAVFAC is organized geographically into 5 EFD's and 4 EFA's. These field engineering offices are responsible for the accomplishments of major projects from conceptual planning to start-up. Figure 2.2 shows the geographical area of responsibility of each one of the field engineering offices. While NAVFAC maintains some overall financial management and policy for the

# Naval Facilities Engineering Command Engineering Field Divisions/Activities

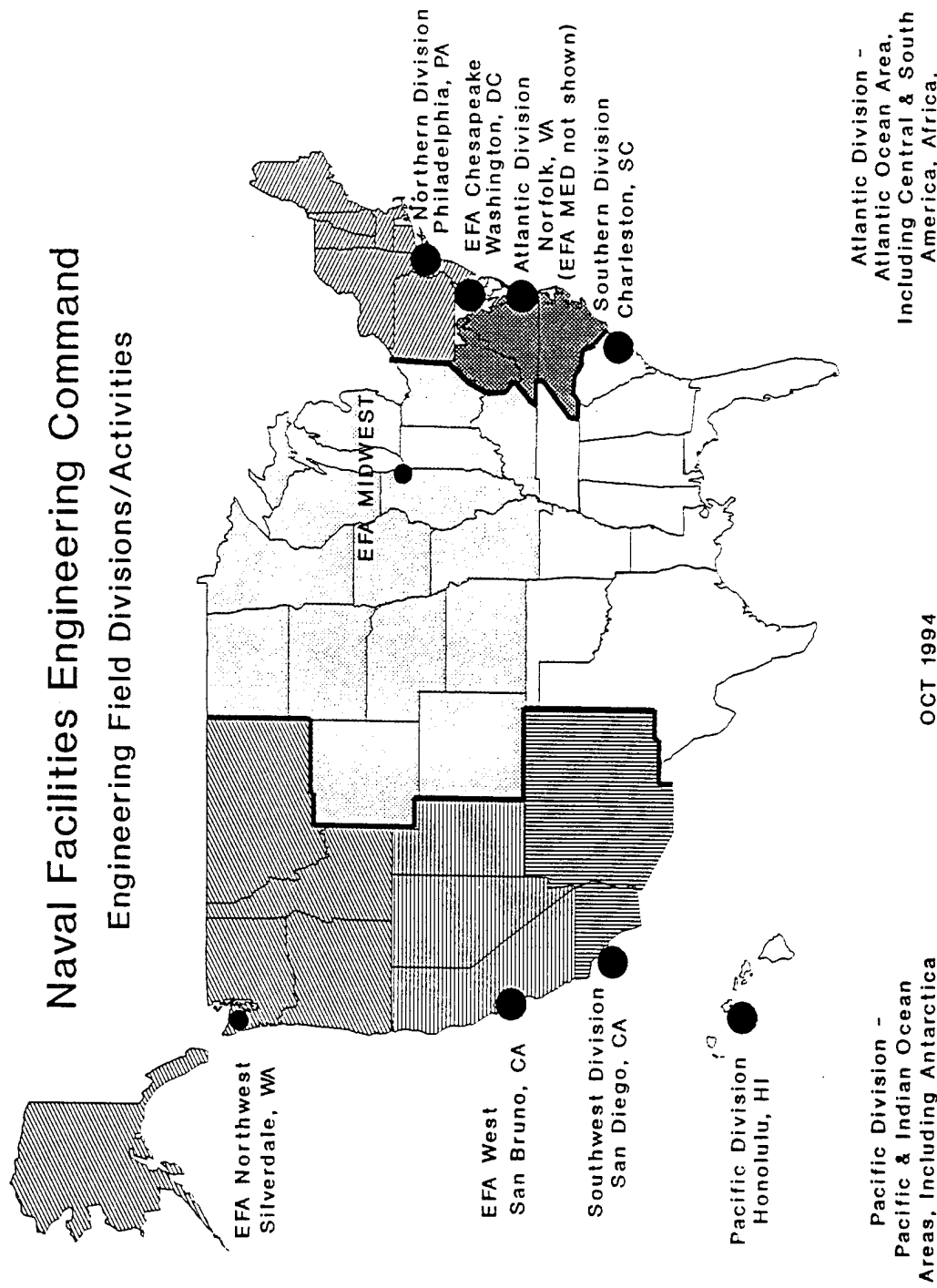


Figure 2.2: EFD/EFA Location & Area of Responsibility

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Navy's MILCON program, the field engineering offices perform all detailed scoping and planning as well as executing the detailed design and construction.

A functional organization of a typical EFD/EFA is shown in Figure 2.3. The conceptual planning work is done initially in the

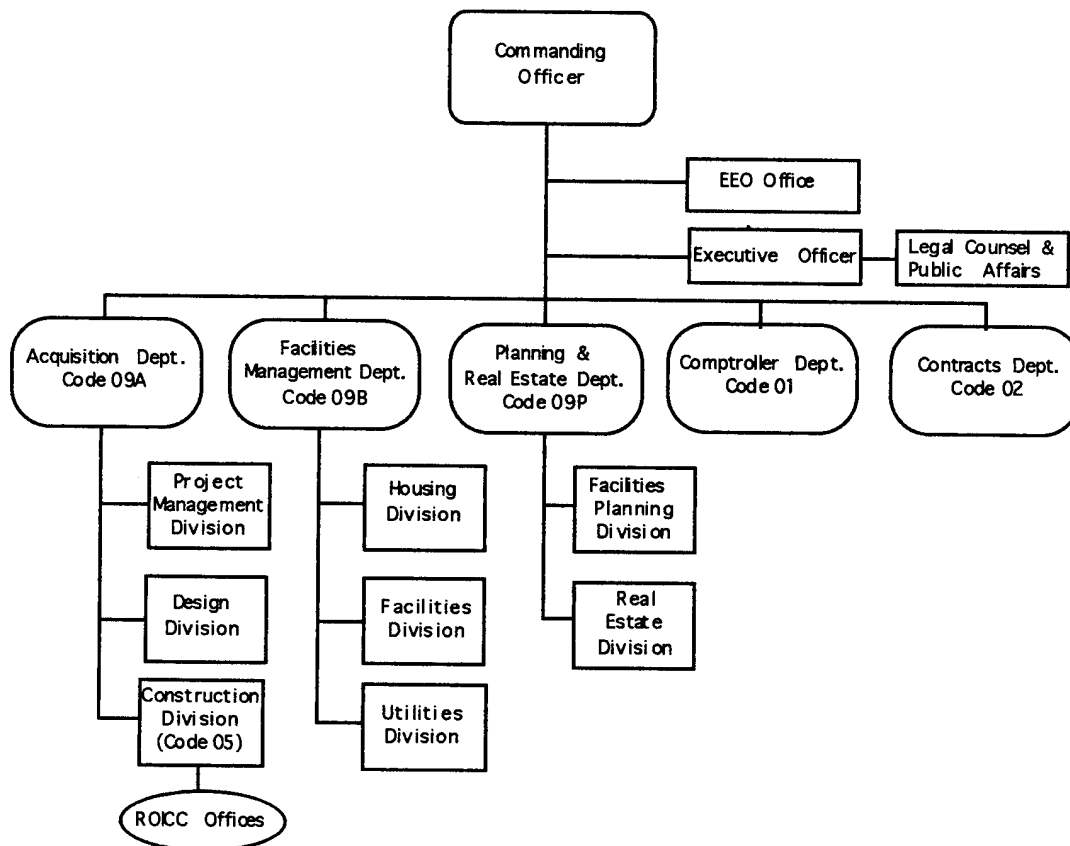


Figure 2.3: Typical EFD/EFA Organizational Chart

Planning Department, followed by the detailed design and construction which are accomplished by the Acquisition Department. The EFD/EFA is further subdivided into field offices entitled Resident Officer in Charge of Construction (ROICC) which handle the administration of the construction contracts after award. These ROICC offices consist of engineers, both civilian and



military, inspectors and contract specialists. Each project is assigned to a team which consists of one member from each specialty.

### 2.3 The MILCON Program.

Most all major capital improvements for the Navy are accomplished through the MILCON program. The MILCON process begins years before any actual construction work is done on site. The process starts with the requirements being identified at the local base level, or the addition of a new mission or weapon system requiring new facilities. After the requirement is identified, the project is submitted through the operational chain-of-command to the Chief of Naval Operations (CNO) for validation. The initial submission needs to include a brief description of the scope and a preliminary cost estimate. If the project is validated and is of high priority, it will become part of the Six Year Defense Plan (SYDP). The process is very competitive given the limited amount of funds available each year for overall defense spending.

The MILCON program is funded annually by Congress as a separate and distinct appropriation. Secondly, not all construction projects are a part of the MILCON process. In some cases, operation and maintenance money may be used for construction, but the most complex and expensive projects performed are part of the MILCON program. Every Navy project over \$ 200,000 must be authorized and appropriated as a specific line item in an annual congressional budget. The process of acquiring a MILCON project is a lengthy and extremely complex one. The flow chart shown in Figure 2.4 summarizes the process.

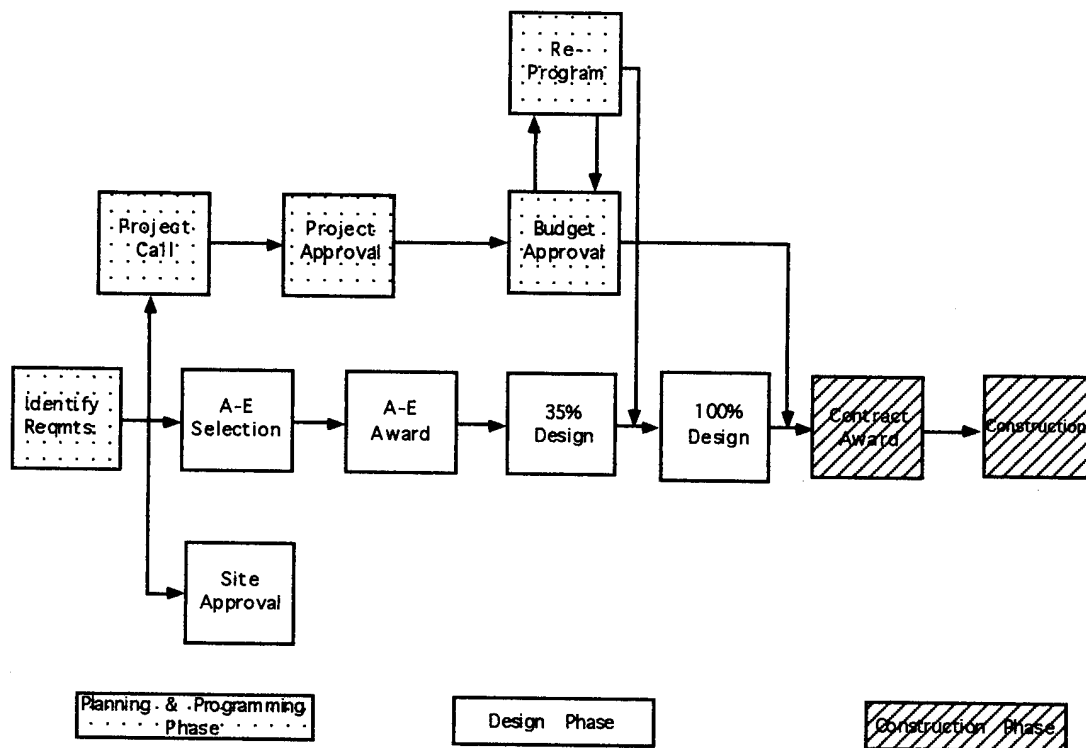


Figure 2.4: MILCON Process Flow Chart

When the project is within three years of its projected budget year, the planning process starts to further define the scope in preparation for design authorization. In some cases, "front-end" planning studies are either conducted in-house, by the EFD/EFA's staff, or by architect-engineer (A-E) firms to further define the project. The work to this point in the process is under the cognizance of the EFD/EFA's Planning Department. At approximately two years prior to the project's funding year and once the project has been certified ready for design, the design of the project is officially authorized. At this point an A-E is selected on the basis of his qualifications, and a contract is negotiated to complete all plans and specifications for the project. It is critical that the A-E contract be awarded as early as possible so that A-E is at least to the 35% point by September of each year, approximately 14 months before the project is funded (projects

are usually funded the first day of October). If this milestone is not met, the project will either be pushed back two years or it will be canceled in its entirety. This situation is controlled by Congressional requirements.

With 35% of the design completed, the project goes into the President's budget submission to Congress as part of the Department of Defense's budget request. It must go through hearings before a number of committees within both houses of the Congress. If the project survives as part of the Congressional budget process and is passed into law, the Navy can enter into a contract to build the project.

## 2.5 Characteristics of the Navy's Contracting Process.

The Federal Acquisition Regulations (FAR) governs all Federal procurement actions, including construction contracts. This regulation was enacted in 1984 to replace the Defense Acquisition Regulations (DAR). The Department of Defense (DoD) has a supplement to the FAR which publishes specific regulations pertaining to the DoD (DFARS). NAVFAC also has its own Contracting Manual (P-68) which contains specific regulations pertaining to NAVFAC procurements.

For the most part, the standard method of contracting for both A-E and construction services in the Navy is the fixed-price contract. In addition most construction contracts are also competitively bid. Any contractor with sufficient financial backing may bid on Government contracts. The solicitation typically requires the contractor to submit performance, payment and bid bonds.

The manner in which contracting is accomplished prevents participants in one phase of a project from participating in other phases of the project. For example, the A-E who designs the project has very little involvement in the construction phase of the process. Similarly, since bidding is normally conducted on an open basis, construction firms are not sought nor are they allowed to participate in the design of the contract. When contractors receive a set of plans to bid, they are seeing them for the first time.

The Planning Department personnel involved in the very early stages of the project usually limit their involvement to that phase of the project. Once the design is authorized, the Project Management Division within the Acquisition Department takes over the responsibilities for overseeing the project until it is designed and the construction contract is awarded.

During the design phase, the Design Division will appoint an Engineer-in-Charge who will become the principal point of contact between the design firm and the customer activity. Once the design is completed and the project funded, the Contracts Department will advertise, receive bids, and award the construction contract. The contract will be awarded to the lowest, responsible bidder.

After the contract is awarded, the Construction Division's Area Manager becomes the project manager at the headquarters level and serves as the liaison between the EFD/EFA and the ROICC. At this stage the ROICC becomes responsible for the day to day execution and administration of the construction in the field until final completion and turnover to the customer. During the Construction phase, the EFD/EFA's Project Manager involvement is, for all practical purposes, reduced to financial resource support

for contract modifications. Figure 2.5 summarizes the level of involvement of the project participants just discussed during the different project phases.

Phases Participants	Planning	Design	Bid & Award	Construction	Occupancy
<u>Customer</u>	-----	-----	-----	-----	-----
EFD: Planning Dept.	=====				
Project Mgmt. Dept.		-----	-----	-----	
Design Div.	-----	=====	-----	-----	
Contracts Dept.	-----	-----	=====	-----	
Construction Div.				-----	
ROICC				=====	-----

Legend:

Continuous involvement    =====  
 Periodic involvement       -----  
 Intermittent involvement    -----

Figure 2.5: Project Participants by Project Phase

## 2.5 Contract Modification Processing.

A modification is contractual guidance provided to the contractor by the owner. These changes typically concern the specifications and drawings. Modifications or changes can involve addition of work, deletion of work, rework, change in material or the method of construction. In addition modifications may be additive, deductive, or no cost, and may or may not include an extension of the contract completion date. The Changes and Differing Site Condition Clauses of the FAR provide a contractual vehicle for directing and executing changes to, among other things,

contract plans and specifications. The Navy normally limits the modifications to those items necessary to ensure a complete and usable facility.

To deal with contract modifications more effectively, the Government has established a formal procedure to process modifications. The process is started when a change condition is identified by either the contractor or the Navy. The ROICC's project engineer or Assistant Resident Officer in Charge of Construction (AROICC) will then identify the scope of the change and prepare a Government estimate. A Government estimate must be prepared for all modifications. If additional funds are required to cover the modification, a formal request for funds is sent to the applicable EFD/EFA's Construction Division Area Manager (Code 05) explaining the reason, scope and providing a preliminary estimate for the modification. A reason code, refer to Appendix B for a listing and explanation of these codes, will be assigned to the modification to categorize it. If the change is a complex one, it may require input from the A-E of record to assist in design revisions or clarifications.

Once funds for the modification are obtained, the AROICC will issue a formal Request for Proposal (RFP) to the contractor asking him to provide an estimate for the required change work. The RFP should include a preliminary date for negotiations, if needed, with a request to notify the ROICC if the proposed date is unacceptable. The contractor then prepares an estimate of the proposed cost and submits it to the Government by the dateline specified on the RFP. The AROICC will then perform a review of the contractor's proposal. If the contractor's proposal is fair and reasonable, a contract modification will be issued. But in most cases some sort of negotiation is needed to arrive at a reasonable price for the change work. After negotiation are completed, the

ROICC office issues a contract modification that is signed by both the contractor and the ROICC's Contracting Officer. The official modification will become a line item in the Schedule of Prices or Schedule of Values.

## 2.6 Modification Tracking System.

The Navy has a formal construction management system to monitor the progress of all active construction contracts and properly track potential changes. This system allows the various divisions within the EFD/EFA to communicate the status of the modification of any project and monitors the ROICC's efforts in definitizing the outstanding modifications.

To maintain this database, each AROICC must maintain a log of all modifications to the contracts under his administration. This log is reviewed monthly by the ROICC to insure that positive action toward resolving outstanding modifications is taken by the AROICC. To ensure adequate documentation, the AROICC must prepare a change order document checklist, Appendix C, to be kept with the modification package. In the event that the contractor fails to respond to request for proposals from the AROICC, the ROICC must take action to ensure the completion of the work, including issuing a unilateral change order. This thesis utilized data obtained from this reporting system to perform the analysis on the selected projects.

## Chapter 3

### Research Methodology

#### 3.1 Introduction.

This thesis analyzes the contract modifications of 135 randomly selected MILCON projects administered by NAVFAC. The 135 contracts analyzed were valued at approximately \$557 million. The projects ranged in cost from \$1 million to \$21 million with the average project valued at approximately \$4.1 million. The only other criteria used to select the projects was that they had to be at least 95% completed at the time the study started.

#### 3.2 Data Gathering.

To be able to perform the EFD/EFA comparative analysis, 15 projects were selected from each one of the 9 EFD/EFA's (except EFA Naples). The contract modifications for the projects were obtained from microfiche records provided by NAVFAC. Any remaining or missing project data was obtained directly from the responsible EFD/EFA.

In addition to the contract modification data, the following information was also extracted from each contract to perform further analysis: contract award amount, total cost of modifications and the project's modification rate.

#### 3.3 Analysis Methods.

Three different sorts were used to perform the per comparative analysis. First, the contract modifications for each project were first sorted by the 12 modification reason codes used



by the Navy, see Appendix B. Subsequent sorts were by the primary trade affected and facility category codes.

The by reason code and trade affected sorts were used to analyze the individual performance of each of the EFD/EFA's. The following major trades/categories were selected for classifying the modifications: civil, earthwork, electrical, HVAC, finishes or architectural, roofing, demolition, hazardous waste removal , door/windows, plumbing and/or piping, site utilities, administrative, equipment installation, claims, extended overhead, time and the category of information not available (n/a). This last category was used when the modification information was not available, missing or the ROICC office had combine several changes into one modification making it impossible to classify the modification as any of the other major trades.

The sort by facility category code was used to establish a relationship between the facility category codes and the project's modification rates.

## Chapter 4

### Analysis of Data

#### 4.1 Introduction.

The first part of this chapter presents the results of the analysis of contract modifications issued by the different EFD/EFA's for projects under their administration. Next, the relationship between the type of facility under construction and the project's modification rate is examined.

#### 4.2 Analysis of Contract Modifications.

The results of the analysis are shown first for NAVFAC as a whole and then individually for each one of the 9 EFD/EFA's included in this study. The contract modifications for the 15 projects from each one of the EFD/EFA's were analyzed and their distribution by reason code assigned and trade involved were summarized. Percent distribution were calculated by reason code, trade involved and total cost of modifications. In addition, the average project modification rate and average costs per modification for each EFD/EFA are discussed.

##### 4.2.1 NAVFAC.

The 135 projects reviewed for this study had a value of \$556,952,025. These projects had a total of 2918 contract modifications valued at \$33,798,552. The average cost per modification issued by NAVFAC was \$11,583. Dividing the total cost of the modifications issued by the total value of all the contracts, an average project modification rate of 6.07% was calculated for NAVFAC as a whole.

The distribution of these modifications by reason code is summarized in Table 1. From this table, the majority of the changes were attributed to design problems (40.3%), unforeseen conditions (28.3%) and customer requested (11.5%) changes. Approximately 82% of the total cost for all modifications issued was due to design (33.4%), unforeseen (31.8%) and the customer requested (19.1%) changes. Figures 4.1 and 4.2 show the percent distribution of these modifications by reason code and its corresponding cost, respectively.

Reason Code	No. of Changes	% of Changes	Total Cost	% of Cost	Avg. Cost per Change
UNFO	825	28.3%	\$10,739,365	31.8%	\$13,017
DSGN	1176	40.3%	11,280,101	33.4%	\$9,592
CREQ	336	11.5%	6,460,289	19.1%	\$19,227
CRIT	120	4.1%	1,857,572	5.5%	\$15,480
IDEA	20	0.7%	(48,209)	-0.1%	(\$2,410)
PLAN	46	1.6%	1,978,099	5.9%	\$43,002
ERROR	32	1.1%	285,032	0.8%	\$8,907
ADMIN	250	8.6%	184,548	0.5%	\$738
CLAIM	28	1.0%	1,157,062	3.4%	\$41,324
TIME	43	1.5%	638	0.0%	\$15
VALUE	29	1.0%	(412,583)	-1.2%	(\$14,227)
SCOPE	13	0.4%	316,638	0.9%	\$24,357
<b>Totals</b>	<b>2918</b>	<b>100%</b>	<b>\$33,798,552</b>	<b>100%</b>	<b>\$11,583</b>

Table 1: NAVFAC's Modifications by Reason Code

Looking at the average cost per modification, it was noted the plan (\$43,002), claim (\$41,324) and scope (\$24,357) modifications had significantly higher averages than the overall NAVFAC average.

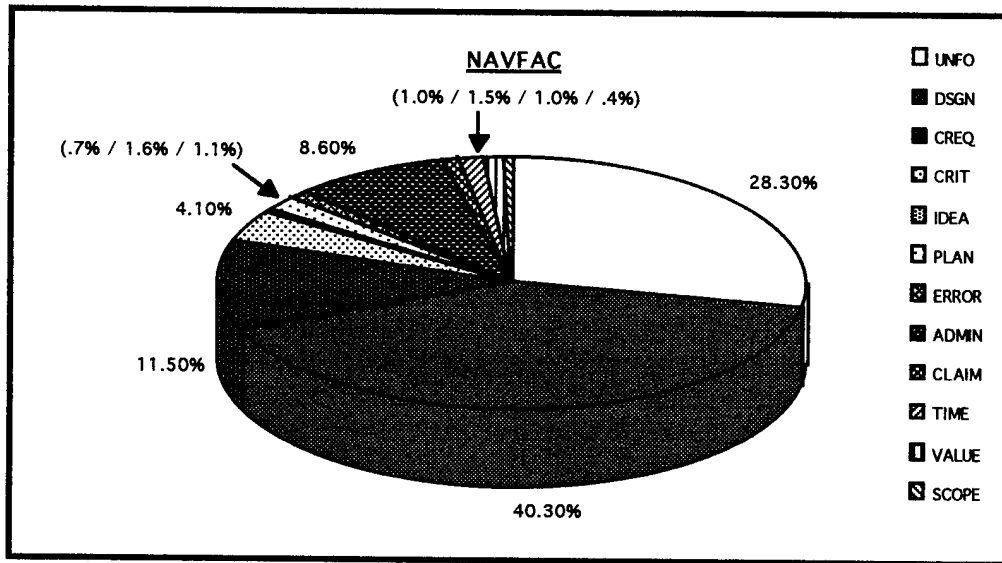


Figure 4.1: Distribution of Modifications by Reason Code

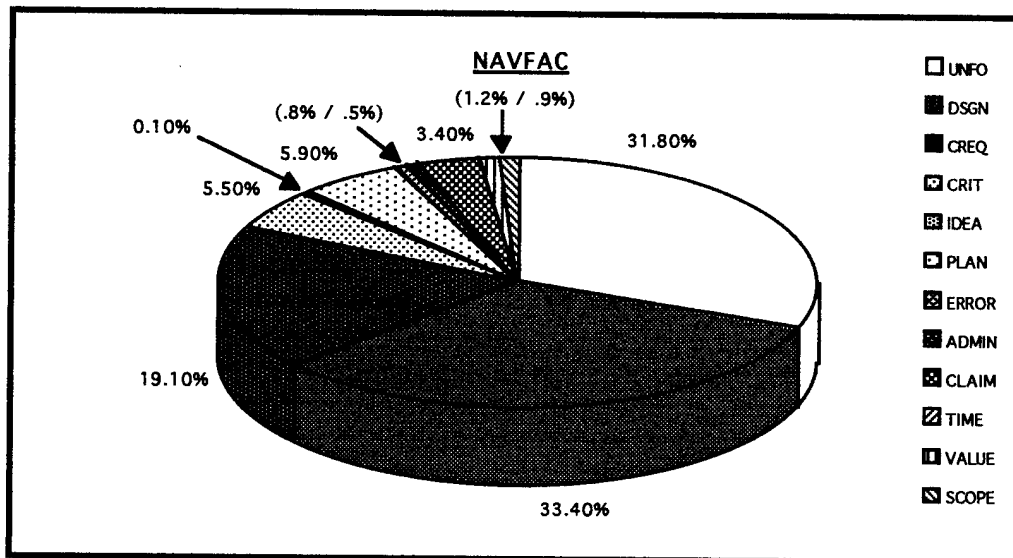


Figure 4.2: Percent Distribution of Cost by Reason Code

The distribution of the modifications by trade is shown in Table 2. The analysis showed that the civil (22%) and electrical (14.9%) related changes made up the majority of the modifications issued. Also noted was that 10.4% of the changes were classified as n/a and therefore the number of modifications reported for some of the trades may have been underestimated. As far as costs are concerned, the civil (27.1%), electrical (13.1%) and earthwork (10.1%) related changes made up about 50% of the total cost. The n/a category accounted for 9.9% of the total cost and therefore this represents a margin of error in the cost distributions of the other trades. Figures 4.3 and 4.4 show the percent distribution of the changes by trade and its corresponding cost, respectively.

Trades	No. of Changes	% of Changes	Total Cost	% of Cost	Avg. Cost per Change
CIVIL	642	22.0%	\$9,169,601	27.1%	\$14,283
EARTHWORK	164	5.6%	\$3,413,665	10.1%	\$20,815
ELECTRICAL	434	14.9%	\$4,436,440	13.1%	\$10,222
HVAC	120	4.1%	\$1,244,845	3.7%	\$10,374
FINISHES	170	5.8%	\$1,168,905	3.5%	\$6,876
ROOFING	47	1.6%	\$251,068	0.7%	\$5,342
DEMOLITION	78	2.7%	\$803,382	2.4%	\$10,300
HAZ. WASTE	53	1.8%	\$1,396,136	4.1%	\$26,342
DOOR/WINDOW	95	3.3%	\$413,013	1.2%	\$4,348
PLUMBING	195	6.7%	\$1,531,855	4.5%	\$7,856
UTILITIES	162	5.6%	\$1,713,306	5.1%	\$10,576
ADMIN	282	9.7%	\$602,353	1.8%	\$2,136
EQUIPMENT	64	2.2%	\$2,345,280	6.9%	\$36,645
CLAIMS	23	0.8%	\$986,217	2.9%	\$42,879
EXT. OVHD	42	1.4%	\$973,970	2.9%	\$23,190
N/A	303	10.4%	\$3,347,878	9.9%	\$11,049
TIME	44	1.5%	\$638	0.0%	\$15
TOTALS	2918	100.0%	\$33,798,552	100.0%	\$11,583

Table 2: NAVFAC's Modifications by Trade

Categories with average costs per modification that exceeded the overall average included: claims (\$42,879), equipment (\$36,640), hazardous waste removal work (\$26,342) and extended overhead (\$23,190).

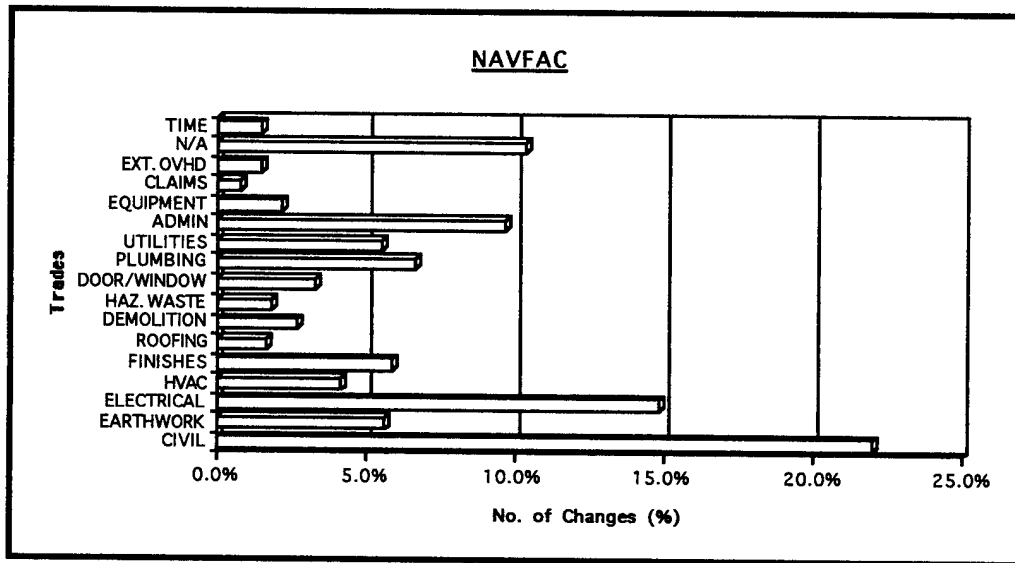


Figure 4.3: Distribution of Modifications by Trade

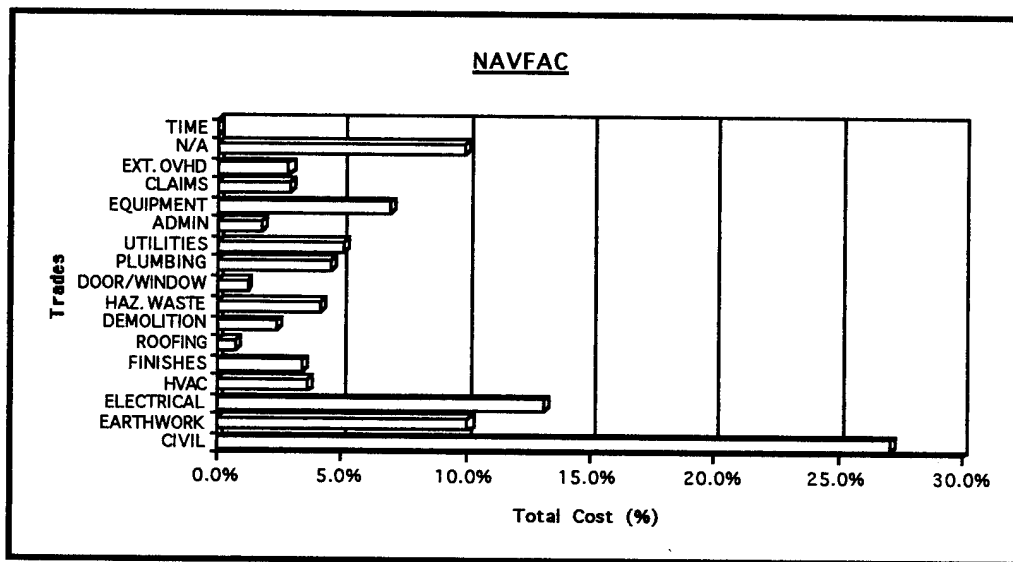


Figure 4.4: Percent Distribution of Cost by Trade

#### 4.2.2 LANTDIV.

The LANTDIV projects used for this analysis were valued at \$51,103,484. These projects had a total of 262 modifications valued at \$3,458,084 issued against them. LANTDIV's modifications averaged \$13,199 each. The average modification rate for the LANTDIV projects was calculated at 6.77%.

Table 3 shows a distribution of the modifications by reason code. The design (34.7%) and unforeseen (30.9 %) reason codes were the most commonly assigned codes. The cost distribution showed the unforeseen (37.4%), design (27.3%), plan (18.1%) and customer requested (11.1%) changes making up almost 90% of the total cost. Figures 4.5 and 4.6 show the percent distribution of the modifications by reason code and its corresponding cost, respectively.

Reason Code	No. of Changes	% of Changes	Total Cost	% of Cost	Avg. Cost per Change
UNFO	81	30.9%	\$1,294,990	37.4%	\$15,988
DSGN	91	34.7%	944,291	27.3%	\$10,377
CREQ	25	9.5%	384,935	11.1%	\$15,397
CRIT	16	6.1%	293,019	8.5%	\$18,314
IDEA	12	4.6%	(125,535)	-3.6%	(\$10,461)
PLAN	9	3.4%	625,590	18.1%	\$69,510
ERROR	1	0.4%	8,766	0.3%	\$8,766
ADMIN	19	7.3%	4,973	0.1%	\$262
CLAIM	5	1.9%	41,819	1.2%	\$8,364
TIME	1	0.4%	0	0.0%	\$0
VALUE	2	0.8%	(14,764)	-0.4%	(\$7,382)
SCOPE	0	0.0%	0	0.0%	\$0
Totals	262	100%	\$3,458,084	100%	\$13,199

Table 3: LANTDIV's Modifications by Reason Code

At \$69,510 per modification, the plan reason code was the only category with a significantly higher average cost per modification than LANTDIV's overall average.

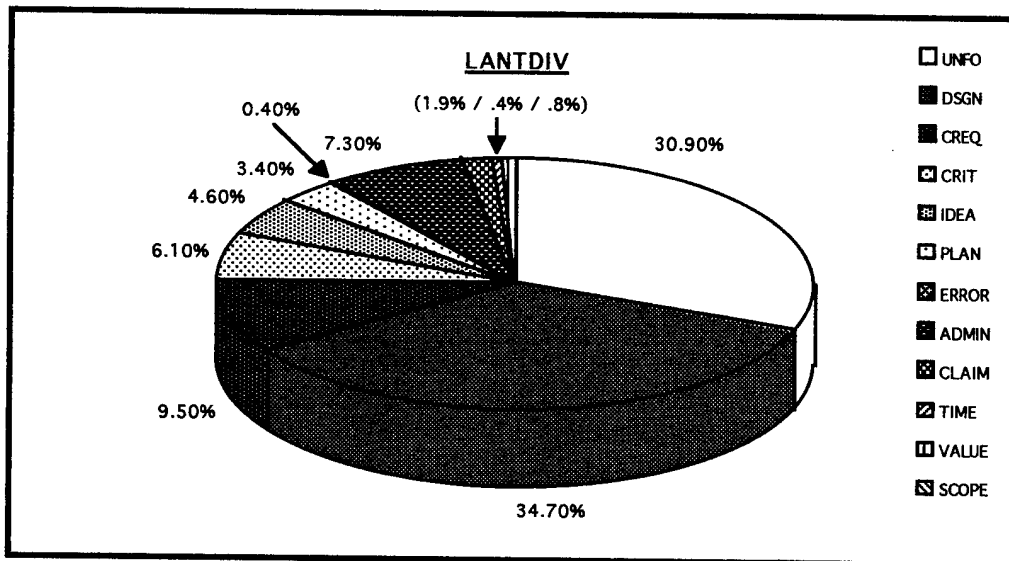


Figure 4.5: Distribution of Modifications by Reason Code

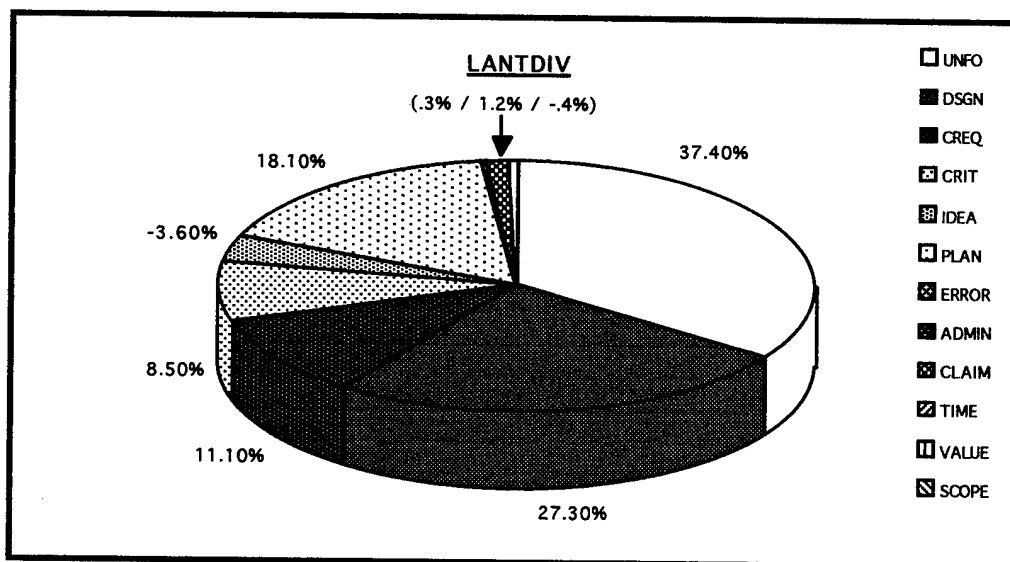


Figure 4.6: Percent Distribution of Cost by Reason Code



The distribution of the modifications by trade is shown in Table 4. The civil (17.2%), electrical (14.5%), earthwork (13.0%) and utilities (10.7%) related changes compromised more than 50% of all changes issued. Approximately 60% of the cost of all modifications was accounted for in the earthwork (30.8%), electrical (18.6%) and civil (11.2%) related changes. Figures 4.7 and 4.8 show the percent distribution of these modifications by trade and its corresponding cost, respectively.

Trades	No. of Changes	% of Changes	Total Cost	% of Cost	Avg. Cost per Change
CIVIL	45	17.2%	\$385,714	11.2%	\$8,571
EARTHWORK	34	13.0%	\$1,066,062	30.8%	\$31,355
ELECTRICAL	38	14.5%	\$643,244	18.6%	\$16,927
HVAC	20	7.6%	\$98,025	2.8%	\$4,901
FINISHES	13	5.0%	\$104,336	3.0%	\$8,026
ROOFING	3	1.1%	(\$2,307)	-0.1%	(\$769)
DEMOLITION	5	1.9%	\$103,640	3.0%	\$20,728
HAZ. WASTE	8	3.1%	\$157,186	4.5%	\$19,648
DOOR/WINDOW	6	2.3%	\$32,062	0.9%	\$5,344
PLUMBING	19	7.3%	\$250,194	7.2%	\$13,168
UTILITIES	28	10.7%	\$330,044	9.5%	\$11,787
ADMIN	19	7.3%	\$4,973	0.1%	\$262
EQUIPMENT	4	1.5%	\$42,081	1.2%	\$10,520
CLAIMS	6	2.3%	\$44,748	1.3%	\$7,458
EXT. OVHD	1	0.4%	\$87,500	2.5%	\$87,500
N/A	11	4.2%	\$110,582	3.2%	\$10,053
TIME	2	0.8%	\$0	0.0%	\$0
<b>TOTALS</b>	<b>262</b>	<b>100.0%</b>	<b>\$3,458,084</b>	<b>100.0%</b>	<b>\$13,199</b>

Table 4: LANTDIV's Modifications by Trades

The trades with higher average costs per change than LANTDIV's overall average were extended overhead (\$87,500) and earthwork (\$31,355).

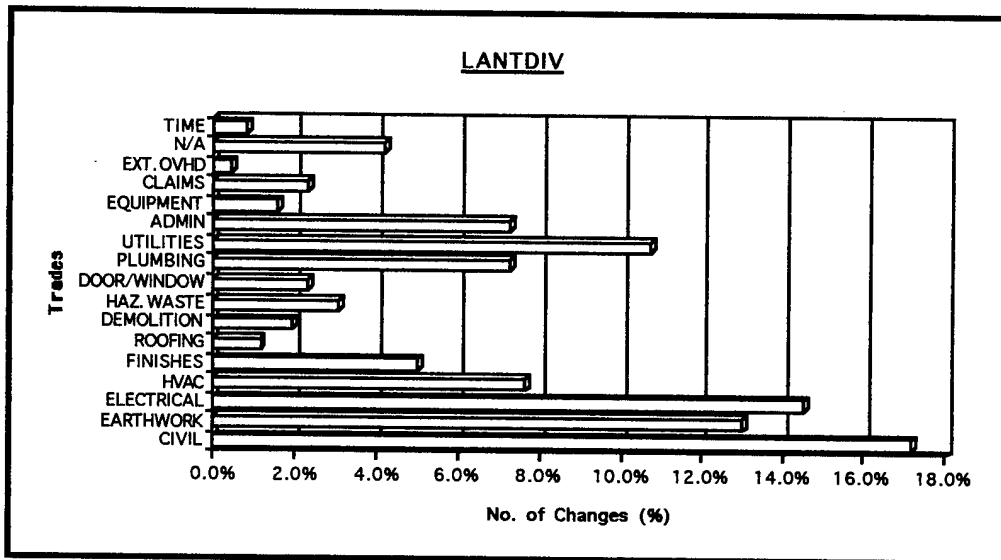


Figure 4.7: Distribution of Modifications by Trade

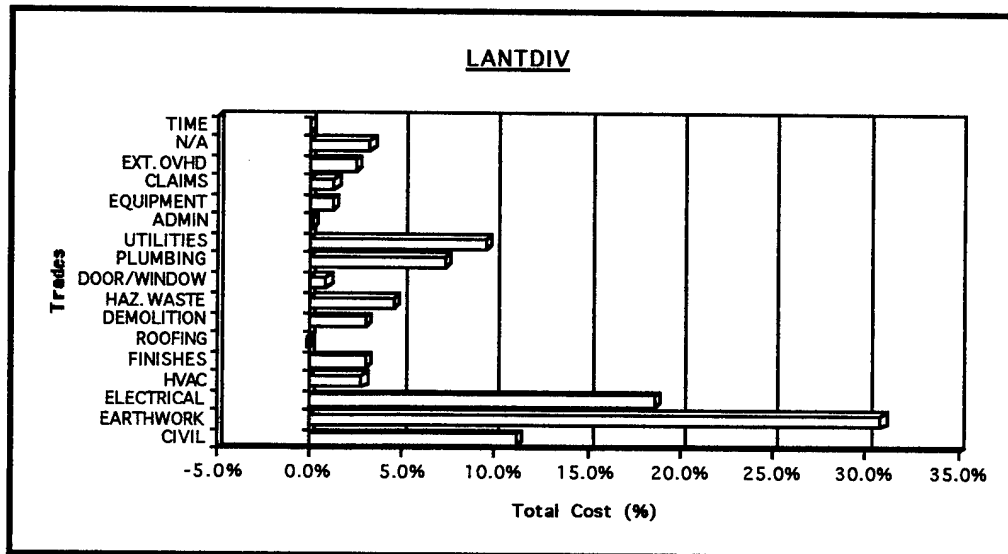


Figure 4.8: Percent Distribution of Cost by Trade

#### 4.2.3 SOUTHDIV.

The SOUTHDIV contracts analyzed for this study were valued at \$55,772,937. A total of 303 contract modifications valued at \$2,205,200 were issued against these contracts. At \$7,278 per modification, SOUTHDIV had the lowest average cost per modification of all the EFD/EFA's. In addition, SOUTHDIV's projects had the lowest average modification rate at 3.95%.

The breakdown of these modifications by reason code is shown in Table 5. The most commonly used reason codes were the design (38.9%), unforeseen (23.8%) and customer requested (13.29%) codes. One interesting observation is the high number of administrative (13.2%) modifications issued. Almost 87% of the cost for all modifications was attributed to three types of modifications: design (34.9%), unforeseen (29.6%) and customer requested (22.6%). Figures 4.9 and 4.10 show the percent distribution of the modifications by reason code and its corresponding cost, respectively.

Reason Code	No. of Changes	% of Changes	Total Cost	% of Cost	Avg. Cost per Change
UNFO	72	23.8%	\$653,794	29.6%	\$9,080
DSGN	118	38.9%	769,658	34.9%	\$6,523
CREQ	40	13.2%	499,380	22.6%	\$12,485
CRIT	3	1.0%	2,973	0.1%	\$991
IDEA	0	0.0%	0	0.0%	\$0
PLAN	1	0.3%	2,990	0.1%	\$2,990
ERROR	9	3.0%	98,752	4.5%	\$10,972
ADMIN	40	13.2%	156,184	7.1%	\$3,905
CLAIM	3	1.0%	55,885	2.5%	\$18,628
TIME	12	4.0%	0	0.0%	\$0
VALUE	3	1.0%	(27,333)	-1.2%	(\$9,111)
SCOPE	2	0.7%	(7,083)	-0.3%	(\$3,542)
Totals	303	100%	\$2,205,200	100%	\$7,278

Table 5: SOUTHDIV's Modifications by Reason Code

At \$18,628 per change, the claims reason code had a considerable higher cost per modification average than SOUTHDIV's overall average.

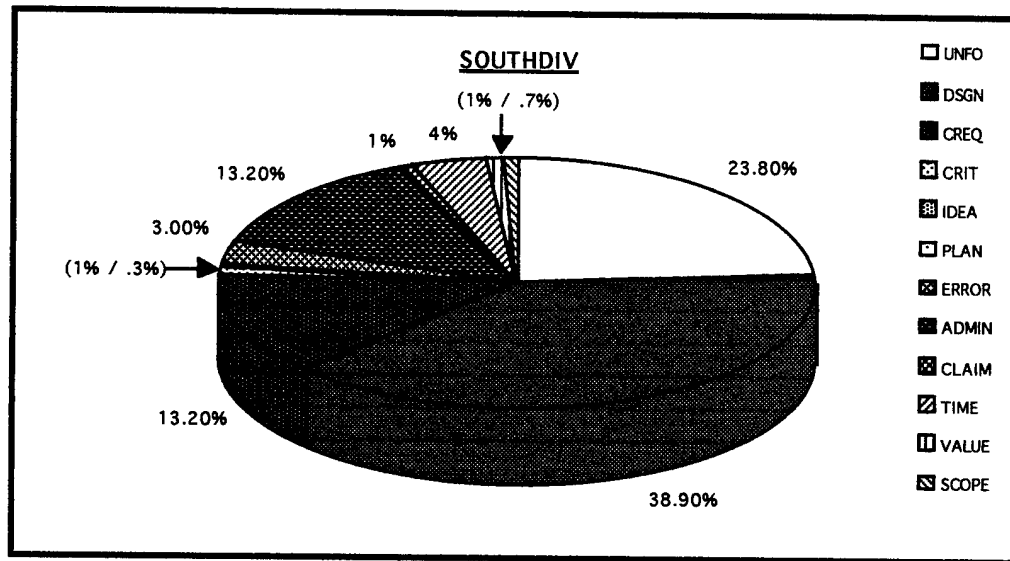


Figure 4.9: Distribution of Modifications by Reason Code

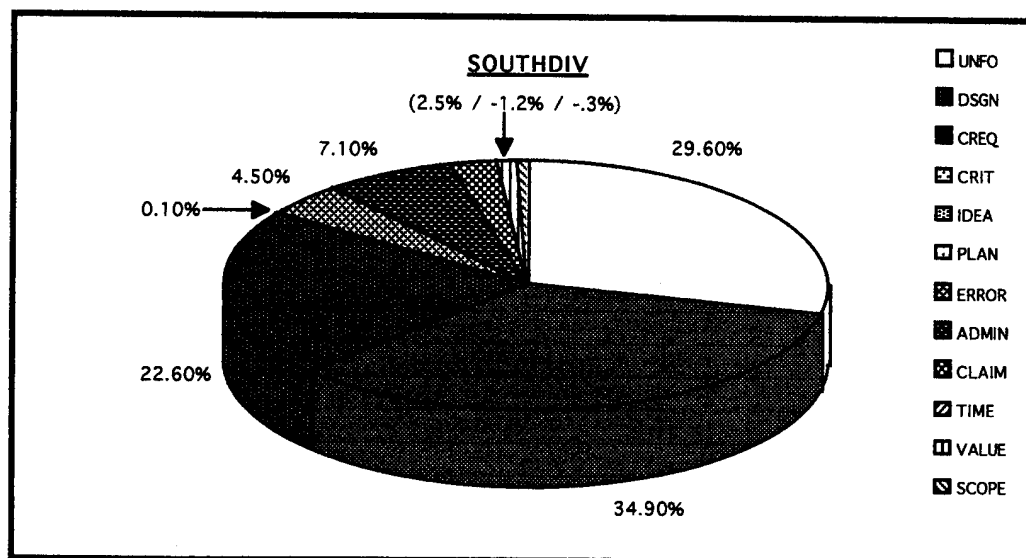


Figure 4.10: Percent Distribution of Cost by Reason Code

The breakdown of the modifications by trade is shown in Table 6. The civil (30.7%), electrical (13.5%) and administrative (13.9%) changes were the most common types of changes issued. On the other hand, 56% of the total cost for all modifications was attributed to civil (25.9%), electrical (19.5%) and earthwork (11.0%) related changes. Figures 4.11 and 4.12 show the percent distribution of the modifications by trade and its corresponding cost, respectively.

Trades	No. of Changes	% of Changes	Total Cost	% of Cost	Avg. Cost per Change
CIVIL	93	30.7%	\$571,605	25.9%	\$6,146
EARTHWORK	11	3.6%	\$242,264	11.0%	\$22,024
ELECTRICAL	41	13.5%	\$430,820	19.5%	\$10,508
HVAC	14	4.6%	\$69,935	3.2%	\$4,995
FINISHES	13	4.3%	\$61,821	2.8%	\$4,755
ROOFING	6	2.0%	\$26,018	1.2%	\$4,336
DEMOLITION	5	1.7%	\$10,163	0.5%	\$2,033
HAZ. WASTE	5	1.7%	\$20,407	0.9%	\$4,081
DOOR/WINDOW	13	4.3%	\$39,914	1.8%	\$3,070
PLUMBING	14	4.6%	\$122,502	5.6%	\$8,750
UTILITIES	18	5.9%	\$140,566	6.4%	\$7,809
ADMIN	42	13.9%	\$163,543	7.4%	\$3,894
EQUIPMENT	11	3.6%	\$78,290	3.6%	\$7,117
CLAIMS	3	1.0%	\$55,885	2.5%	\$18,628
EXT. OVHD	3	1.0%	\$171,467	7.8%	\$57,156
N/A	0	0.0%	\$0	0.0%	\$0
TIME	11	3.6%	\$0	0.0%	\$0
TOTALS	303	100.0%	\$2,205,200	100.0%	\$7,278

Table 6: SOUTHDIV's Modifications by Trade

There were 3 types of modifications with significantly higher cost per modification averages than SOUTHDIV's overall average. These included extended overhead (\$57,156), earthwork (\$22,024) and claims (\$18,628) related changes.

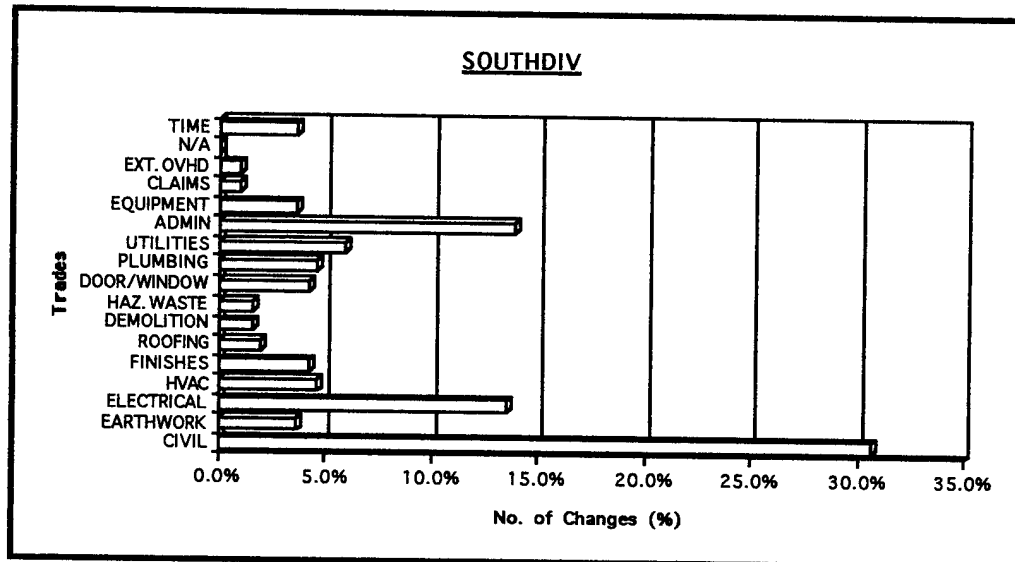


Figure 4.11: Distribution of Modifications by Trade

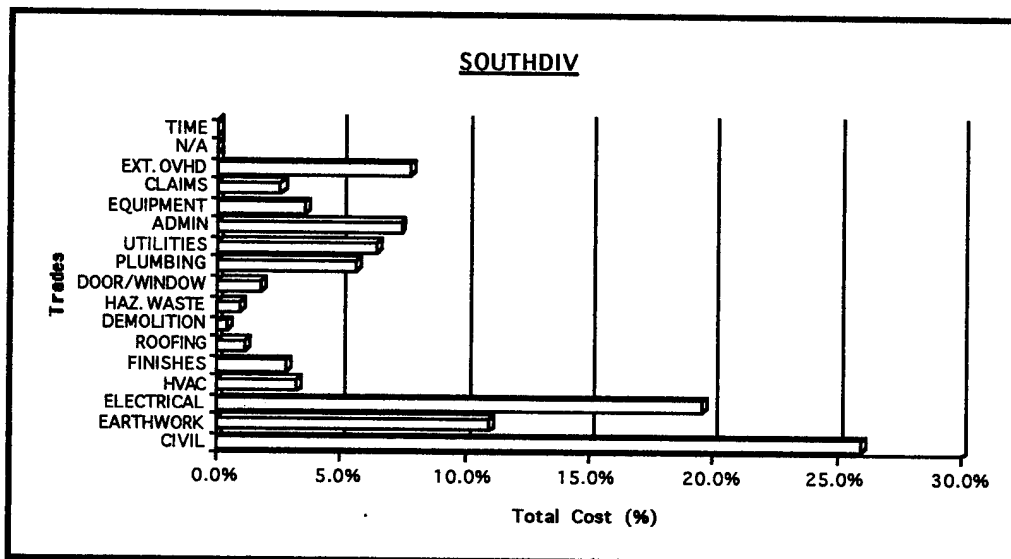


Figure 4.12: Percent Distribution of Cost by Trade

#### 4.2.4 NORTHDIV.

The NORTHDIV projects analyzed were valued at \$53,918,755. A total of 273 contract modifications valued at \$3,806,538 were issued against these projects. The average cost per modification was the second highest at \$13,943. NORTHDIV had the second highest average modification rate at 7.06%.

The distribution of these modifications by reason code is shown in Table 7. The most common types of modifications included design (39.6%), unforeseen (33.7%) and administrative (10.3%). Of these modifications the unforeseen (46.9%), design (31.7%) and plan (14.4%) changes accounted for almost 93% of the cost of all modification issued. Figures 4.13 and 4.14 show the percent distribution of these modifications by reason code and its corresponding cost, respectively.

Reason Code	No. of Changes	% of Changes	Total Cost	% of Cost	Avg. Cost per Change
UNFO	92	33.7%	\$1,784,943	46.9%	\$19,402
DSGN	108	39.6%	1,207,016	31.7%	\$11,176
CREQ	17	6.2%	133,687	3.5%	\$7,864
CRIT	5	1.8%	201,724	5.3%	\$40,345
IDEA	0	0.0%	0	0.0%	\$0
PLAN	11	4.0%	546,606	14.4%	\$49,691
ERROR	3	1.1%	11,618	0.3%	\$3,873
ADMIN	28	10.3%	13,316	0.3%	\$476
CLAIM	1	0.4%	100,910	2.7%	\$100,910
TIME	5	1.8%	0	0.0%	\$0
VALUE	3	1.1%	(193,282)	-5.1%	(\$64,427)
SCOPE	0	0.0%	0	0.0%	\$0
Totals	273	100%	\$3,806,538	100%	\$13,943

Table 7: NORTHDIV's Modifications by Reason Code

There were 3 types of modification with significantly higher cost per modification averages than NORTHDIV's overall average. These included claim (\$100,910), plan (\$49,691) and criteria (\$40,345) changes.

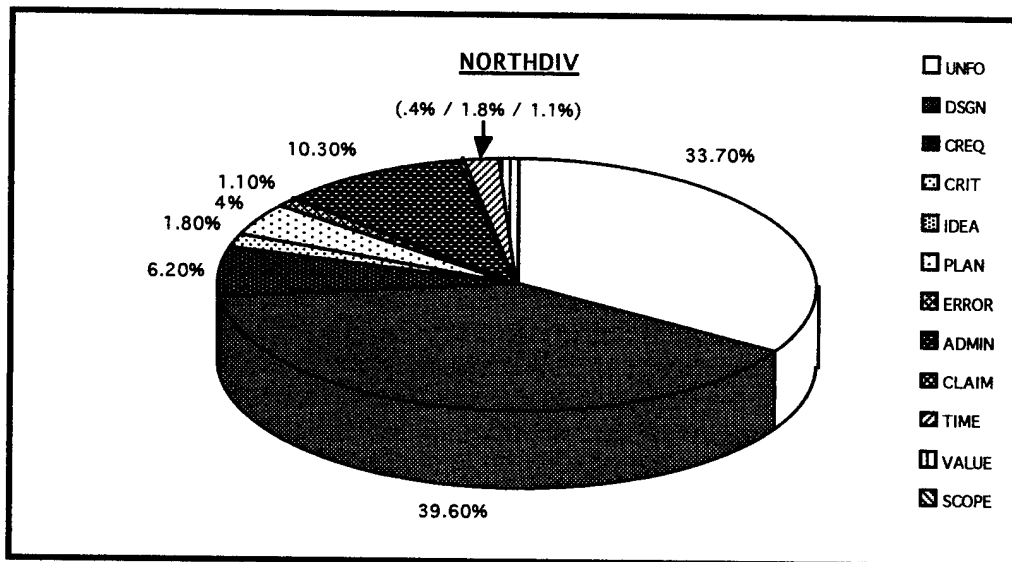


Figure 4.13: Distribution of Modifications by Reason Code

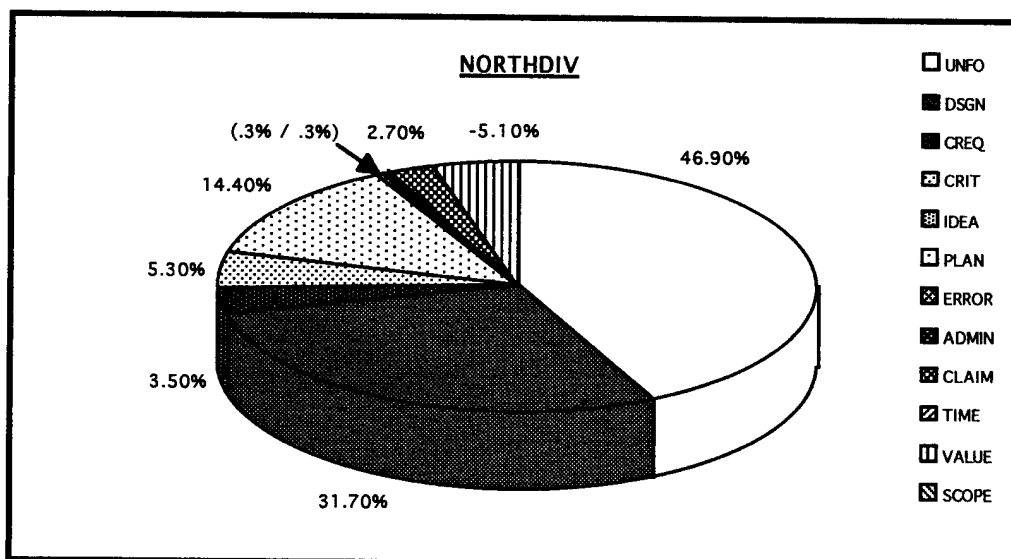


Figure 4.14: Percent Distribution of Cost by Reason Code



The breakdown of the modifications by trade is summarized in Table 8. The electrical (20.1%), civil (14.7%) and administrative (11.0%) related changes were the most commonly involved in modifications. The costs were well distributed between the different trades except for earthwork (19.9%) and electrical (19.2%) related changes that accounted for approximately 40% of the total cost for all modifications. Figures 4.15 and 4.16 show the percent distributions of these modifications by trade and its corresponding cost, respectively.

Trades	No. of Changes	% of Changes	Total Cost	% of Cost	Avg. Cost per Change
CIVIL	40	14.7%	\$103,157	2.7%	\$2,579
EARTHWORK	14	5.1%	\$756,075	19.9%	\$54,005
ELECTRICAL	55	20.1%	\$731,064	19.2%	\$13,292
HVAC	8	2.9%	\$252,627	6.6%	\$31,578
FINISHES	18	6.6%	\$163,993	4.3%	\$9,111
ROOFING	7	2.6%	\$43,913	1.2%	\$6,273
DEMOLITION	11	4.0%	\$232,462	6.1%	\$21,133
HAZ. WASTE	7	2.6%	\$199,758	5.2%	\$28,537
DOOR/WINDOW	6	2.2%	\$5,263	0.1%	\$877
PLUMBING	22	8.1%	\$224,481	5.9%	\$10,204
UTILITIES	15	5.5%	\$251,349	6.6%	\$16,757
ADMIN	30	11.0%	\$146,614	3.9%	\$4,887
EQUIPMENT	5	1.8%	\$294,218	7.7%	\$58,844
CLAIMS	0	0.0%	\$0	0.0%	\$0
EXT. OVHD	8	2.9%	\$298,133	7.8%	\$37,267
N/A	21	7.7%	\$103,431	2.7%	\$4,925
TIME	6	2.2%	\$0	0.0%	\$0
TOTALS	273	100.0%	\$3,806,538	100.0%	\$13,943

Table 8: NORTHDIV's Modifications by Trade

There were 5 types of modifications that had a much higher average cost per modification than NORTHDIV's overall average. These included equipment installation (\$58,844), earthwork (\$54,005), extended overhead (\$37,267), HVAC (\$31,578) and hazardous waste removal (\$28,537) modifications.

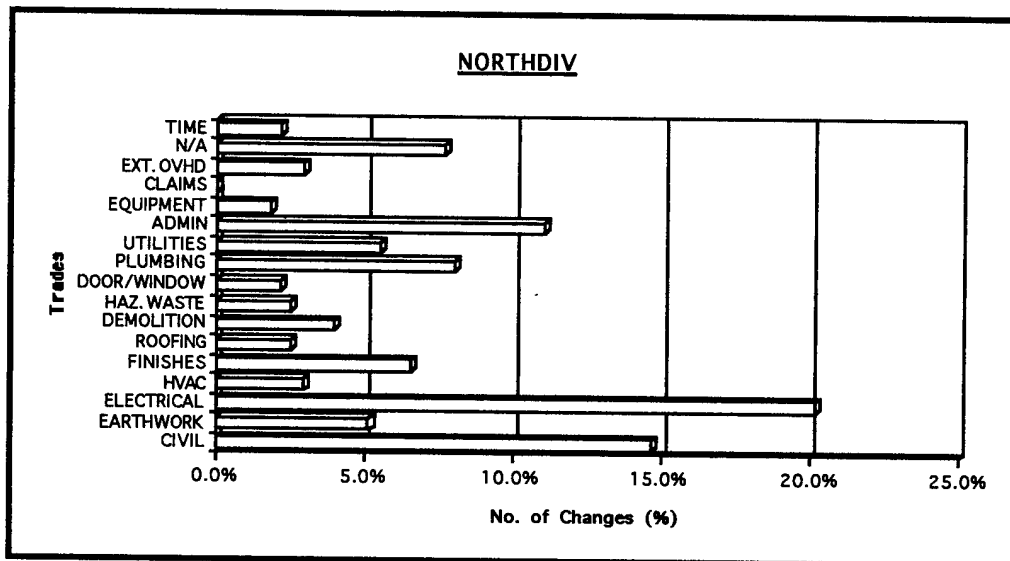


Figure 4.15: Distribution of Modifications by Trade

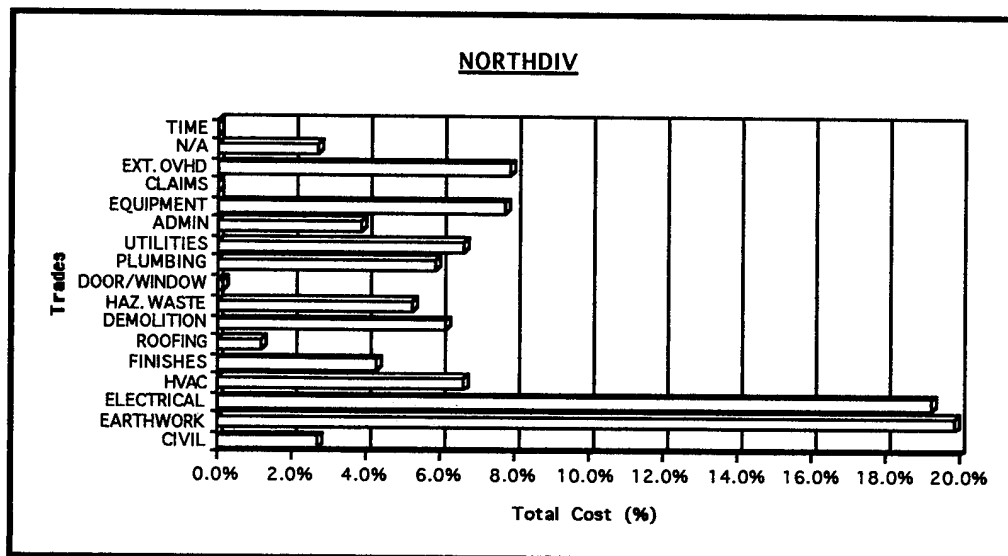


Figure 4.16: Percent Distribution of Cost by Trade

#### 4.2.5 PACDIV.

The PACDIV contracts used for this study had a value of \$75,411,478. A total of 264 modifications valued at \$4,281,374 were reviewed. PACDIV had the highest cost per modification average (\$16,217) of all the EFD/EFA's. The average modification rate for PACDIV's projects was calculated at 5.68%.

The distribution of the modifications by reason code is shown in Table 9. The most common types of reason codes used for modifications were the unforeseen (45.8%) and design (26.9%). The bulk of the cost, almost 90%, was attributed to unforeseen (32.2%), customer requested (31.7%) and design (27.7%) changes. Figures 4.17 and 4.19 show the percent distribution of these modifications by reason code and its corresponding cost, respectively.

Reason Code	No. of Changes	% of Changes	Total Cost	% of Cost	Avg. Cost per Change
UNFO	121	45.8%	\$1,380,420	32.2%	\$11,408
DSGN	71	26.9%	1,183,879	27.7%	\$16,674
CREQ	23	8.7%	1,356,661	31.7%	\$58,985
CRIT	16	6.1%	388,236	9.1%	\$24,265
IDEA	0	0.0%	0	0.0%	\$0
PLAN	1	0.4%	7,525	0.2%	\$7,525
ERROR	3	1.1%	54,585	1.3%	\$18,195
ADMIN	14	5.3%	(36,800)	-0.9%	(\$2,629)
CLAIM	0	0.0%	0	0.0%	\$0
TIME	4	1.5%	0	0.0%	\$0
VALUE	9	3.4%	(80,511)	-1.9%	(\$8,946)
SCOPE	2	0.8%	27,379	0.6%	\$13,690
Totals	264	100%	\$4,281,374	100%	\$16,217

Table 9: PACDIV's Modifications by Reason Code

Only the customer requested (\$58,985) modifications had a significantly higher cost per modification average than PACDIV's overall average.

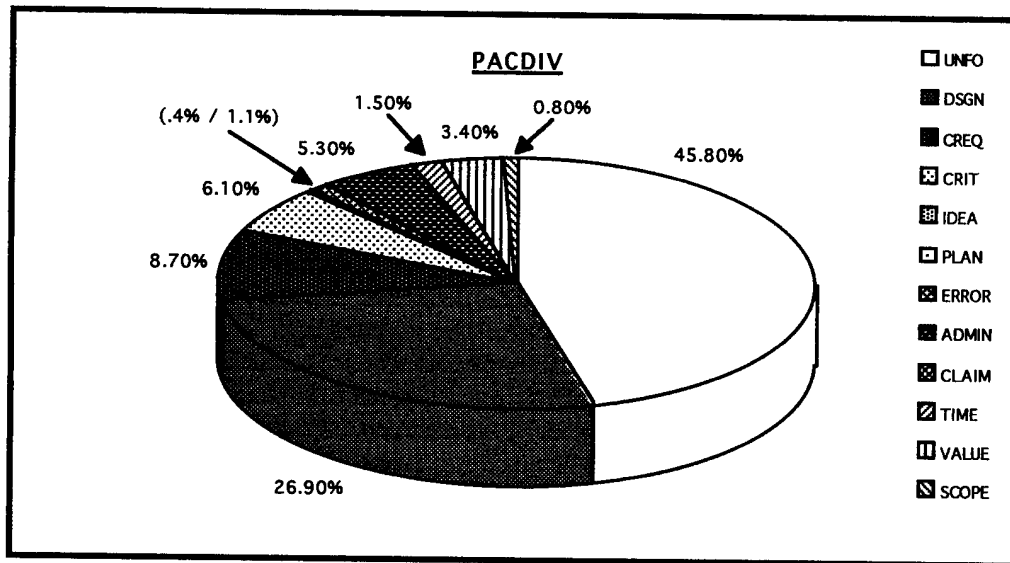


Figure 4.17: Distribution of Modifications by Reason Code

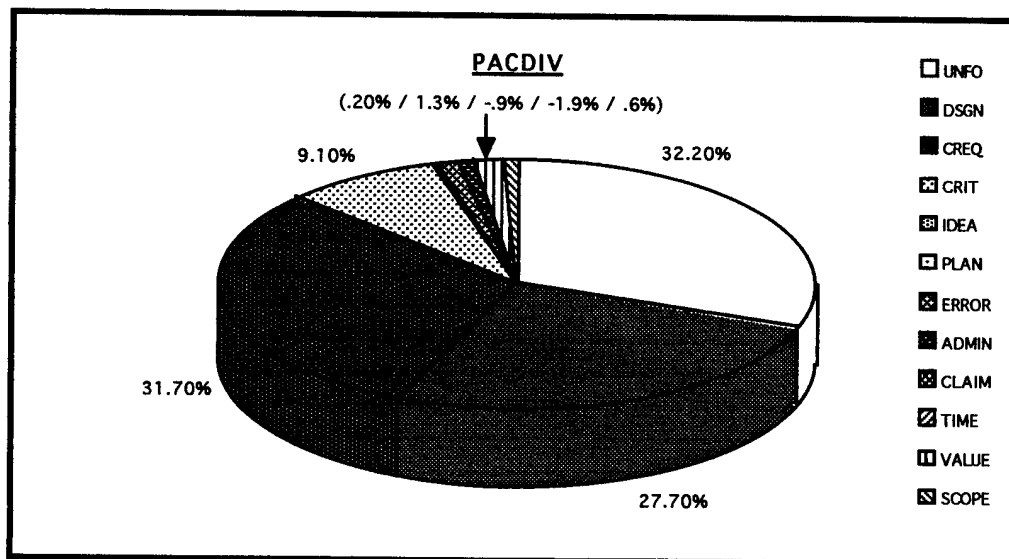


Figure 4.18: Percent Distribution of Cost by Reason Code

The distribution of these modifications by trade involved is shown in Table 10. The by trade analysis performed for this division was not considered very reliable due to the high percentage (16.3%) of modification classified as information not available (n/a). The only other trade that was involved in more than 10% of the modifications was the civil (20.1%) trade. The data was also unreliable for the total cost per trade analysis since 40.5% of the total cost was attributed to the information not available category (n/a). The civil trade accounted for 25.8% of the total cost. Figures 4.19 and 4.20 show the percent distribution of these modifications by trade and its corresponding cost, respectively.

Trades	No. of Changes	% of Changes	Total Cost	% of Cost	Avg. Cost per Change
CIVIL	53	20.1%	\$1,102,952	25.8%	\$20,810
EARTHWORK	24	9.1%	\$172,502	4.0%	\$7,188
ELECTRICAL	22	8.3%	\$202,550	4.7%	\$9,207
HVAC	5	1.9%	\$18,390	0.4%	\$3,678
FINISHES	14	5.3%	\$315,394	7.4%	\$22,528
ROOFING	3	1.1%	(\$223)	0.0%	(\$74)
DEMOLITION	16	6.1%	\$219,302	5.1%	\$13,706
HAZ. WASTE	7	2.7%	\$102,772	2.4%	\$14,682
DOOR/WINDOW	2	0.8%	(\$24,325)	-0.6%	(\$12,163)
PLUMBING	15	5.7%	\$96,880	2.3%	\$6,459
UTILITIES	20	7.6%	\$198,579	4.6%	\$9,929
ADMIN	19	7.2%	(\$17,700)	-0.4%	(\$932)
EQUIPMENT	10	3.8%	\$30,316	0.7%	\$3,032
CLAIMS	0	0.0%	\$0	0.0%	\$0
EXT. OVHD	9	3.4%	\$131,352	3.1%	\$14,595
N/A	43	16.3%	\$1,732,633	40.5%	\$40,294
TIME	2	0.8%	\$0	0.0%	\$0
TOTALS	264	100.0%	\$4,281,374	100.0%	\$16,217

Table 10: PACDIV's Modifications by Trade

The data was unreliable to analyze the average cost per modification by trade for the PACDIV projects.

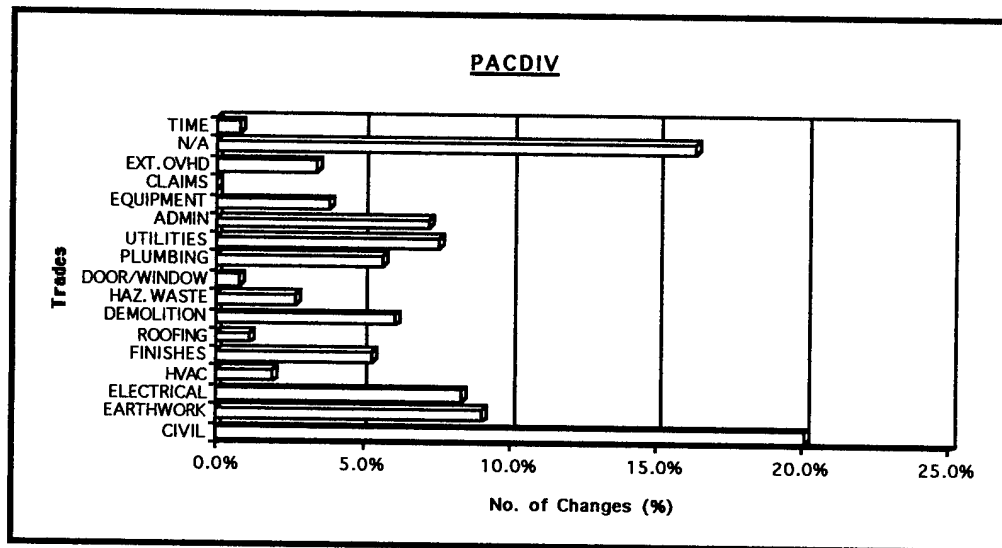


Figure 4.19: Distribution of Modifications by Trade

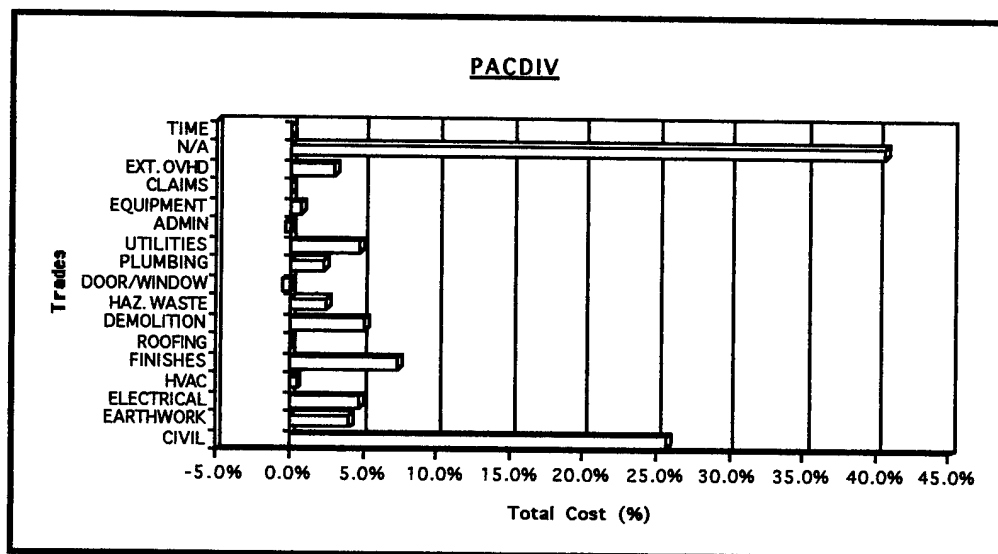


Figure 4.20: Percent Distribution of Cost by Trade

#### 4.2.6 SOUTHWESTDIV.

The SOUTHDIV contracts used for this analysis were valued at \$58,228,829. These contracts had a total of 345 modifications valued at \$2,903,846 issued against them. The average cost per modification was the second lowest at \$8,417. SOUTHWESTDIV had the third lowest average modification rate at 4.99%.

The distribution of the modifications by reason code is shown in Table 11. Of the modification issued, the design (47.0%), unforeseen (18.8%) and customer requested (11.0%) reason codes were the most commonly assigned. Most of the total cost for the modifications was made up by design (43.3%) and unforeseen (39.9%) changes. It is also interesting to note that scope changes made up almost 10.0% of the total cost. Figures 4.21 and 4.22 show the percent distribution of changes by reason code and its corresponding cost, respectively.

Reason Code	No. of Changes	% of Changes	Total Cost	% of Cost	Avg. Cost per Change
UNFO	65	18.8%	\$1,158,548	39.9%	\$17,824
DSGN	162	47.0%	1,258,061	43.3%	\$7,766
CREQ	38	11.0%	59,515	2.0%	\$1,566
CRIT	25	7.2%	39,893	1.4%	\$1,596
IDEA	2	0.6%	(1,505)	-0.1%	(\$753)
PLAN	3	0.9%	4,155	0.1%	\$1,385
ERROR	0	0.0%	0	0.0%	\$0
ADMIN	32	9.3%	0	0.0%	\$0
CLAIM	5	1.4%	132,601	4.6%	\$26,520
TIME	4	1.2%	0	0.0%	\$0
VALUE	2	0.6%	(29,630)	-1.0%	(\$14,815)
SCOPE	7	2.0%	282,208	9.7%	\$40,315
Totals	345	100%	\$2,903,846	100%	\$8,417

Table 11: SOUTHWESTDIV's Modifications by Reason Code

The scope (\$40,315), claims (\$26,520) and unforeseen (\$17,824) reason codes had significantly higher cost per modification averages than SOUTHWESTDIV's overall average.

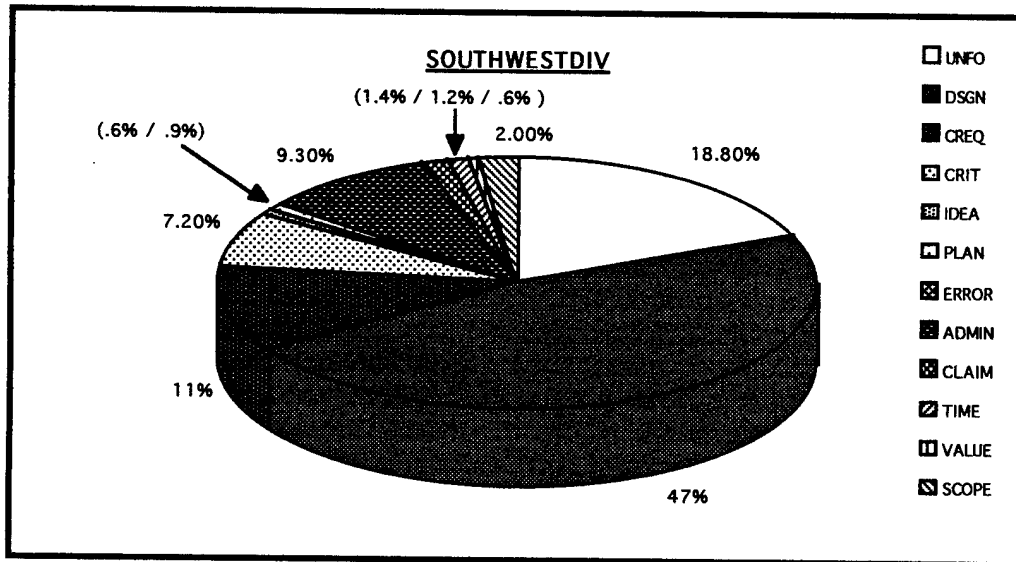


Figure 4.21: Distribution of Modifications by Reason Code

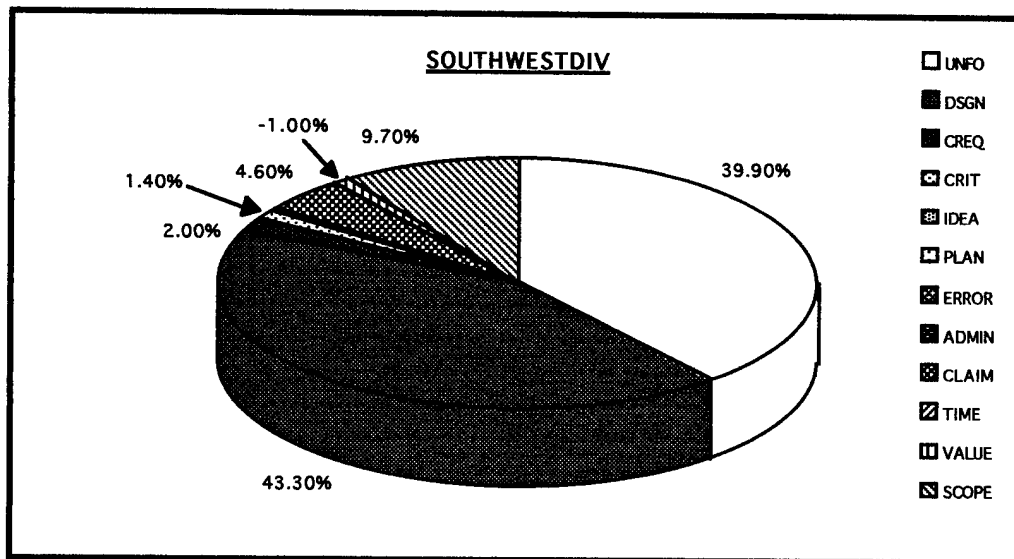


Figure 4.22: Percent Distribution of Cost by Reason Code



The distribution of these modifications by trade involved is shown in Table 12. Here again the data was not very reliable since the information not available (n/a) category compromised 25.8% of all the changes. Other trades with considerable number of changes were the civil (18.8%) and electrical (12.5%). Five trades were responsible for most of the cost of all modifications. These included civil (26.0%), earthwork (15.6%), electrical (13.9%), information not available (13.0%) and the site utilities (12.2%) trades. The high cost attributed to the information not available (n/a) category makes this analysis unreliable. Figures 4.23 and 4.24 show the percent distribution of these modifications by trade and its corresponding cost, respectively.

Trades	No. of Changes	% of Changes	Total Cost	% of Cost	Avg. Cost per Change
CIVIL	65	18.8%	\$754,645	26.0%	\$11,610
EARTHWORK	15	4.3%	\$452,190	15.6%	\$30,146
ELECTRICAL	43	12.5%	\$404,996	13.9%	\$9,419
HVAC	4	1.2%	\$40,331	1.4%	\$10,083
FINISHES	22	6.4%	\$81,084	2.8%	\$3,686
ROOFING	3	0.9%	\$1,152	0.0%	\$384
DEMOLITION	13	3.8%	\$83,161	2.9%	\$6,397
HAZ. WASTE	0	0.0%	\$0	0.0%	\$0
DOOR/WINDOW	10	2.9%	\$10,333	0.4%	\$1,033
PLUMBING	16	4.6%	\$98,359	3.4%	\$6,147
UTILITIES	13	3.8%	\$354,817	12.2%	\$27,294
ADMIN	32	9.3%	(\$5,000)	-0.2%	(\$156)
EQUIPMENT	6	1.7%	\$61,740	2.1%	\$10,290
CLAIMS	3	0.9%	\$58,918	2.0%	\$19,639
EXT. OVHD	7	2.0%	\$128,487	4.4%	\$18,355
N/A	89	25.8%	\$378,633	13.0%	\$4,254
TIME	4	1.2%	\$0	0.0%	\$0
TOTALS	345	100.0%	\$2,903,846	100.0%	\$8,417

Table 12: SOUTHWESTDIV's Modifications by Trade

Four categories of changes had significantly higher than average costs per modification. These included earthwork (\$30,146), site utilities (\$27,294), claims (\$19,639) and extended overhead (\$18,355) modifications.

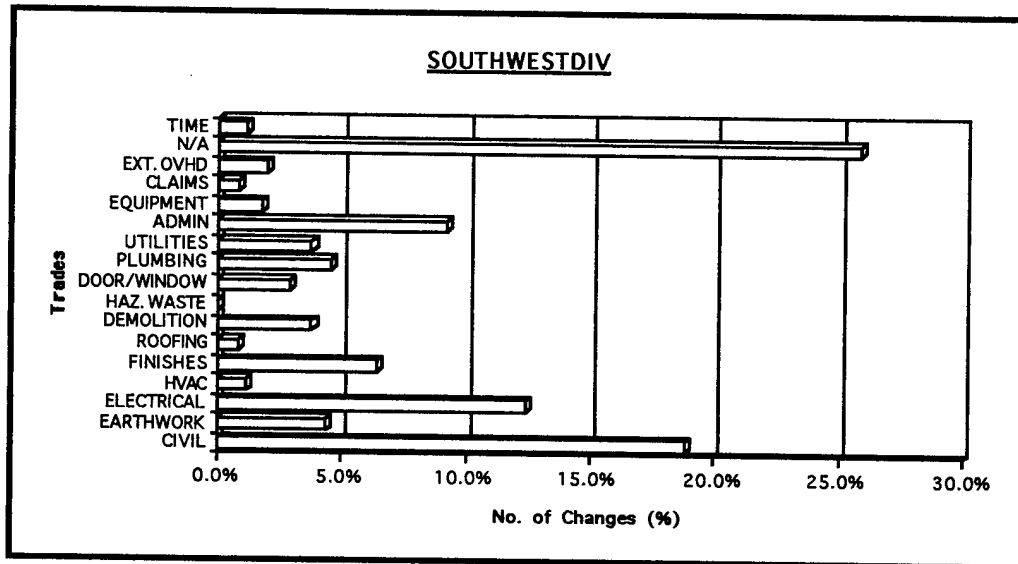


Figure 4.23: Distribution of Modifications by Trade

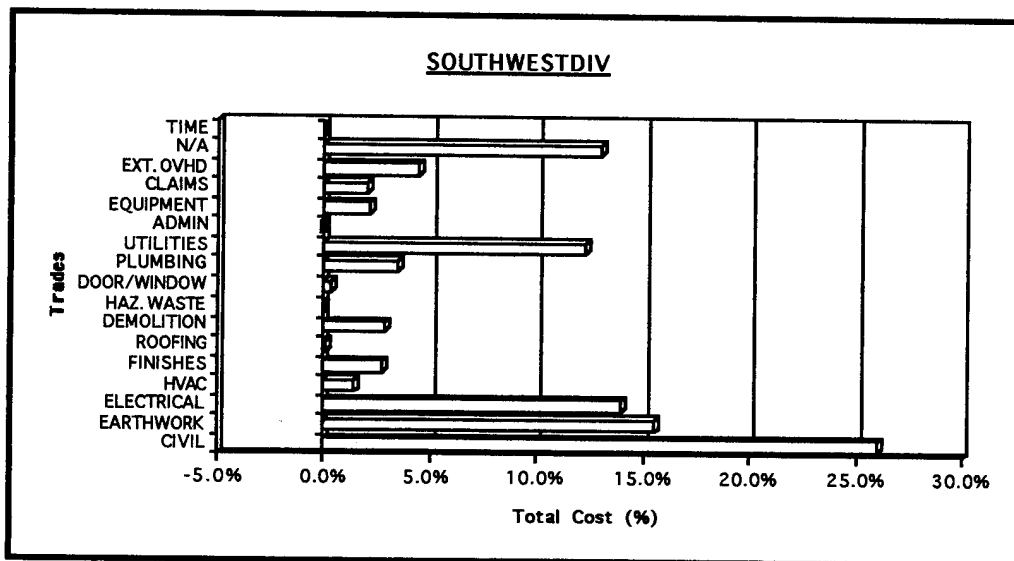


Figure 4.24: Percent Distribution of Cost by Trade

#### 4.2.7 EFA WEST.

The contracts used for the analysis of EFA WEST were valued at \$65,993,502. For these contracts a total of 385 modifications valued at \$3,869,524 were issued. The average cost per modifications was calculated at \$10,051. The average modification rate for EFA WEST's project was calculated at 5.86%.

A breakdown of the modifications by reason codes is shown in Table 13. The most common reason codes assigned included design (38.4%), unforeseen (26.5%), customer requested (16.9%) and administrative (10.1%). The total cost for the modifications was mostly attributed to the design (27.2%), unforeseen (24.2%), customer requested (22.3%) and claim (14.4%) changes. Figures 4.25 and 4.26 show the percent distribution of these modifications by reason code and its corresponding cost, respectively.

Reason Code	No. of Changes	% of Changes	Total Cost	% of Cost	Avg. Cost per Change
UNFO	102	26.5%	\$936,875	24.2%	\$9,185
DSGN	148	38.4%	1,053,986	27.2%	\$7,122
CREQ	65	16.9%	861,576	22.3%	\$13,255
CRIT	5	1.3%	87,600	2.3%	\$17,520
IDEA	5	1.3%	86,283	2.2%	\$17,257
PLAN	5	1.3%	341,582	8.8%	\$68,316
ERROR	0	0.0%	0	0.0%	\$0
ADMIN	39	10.1%	(19,933)	-0.5%	(\$511)
CLAIM	4	1.0%	556,205	14.4%	\$139,051
TIME	7	1.8%	0	0.0%	\$0
VALUE	5	1.3%	(34,650)	-0.9%	(\$6,930)
SCOPE	0	0.0%	0	0.0%	0
Totals	385	100%	\$3,869,524	100%	\$10,051

Table 13: EFA WEST's Modifications by Reason Code

The modifications identified with the claim (\$139,051) and plan (\$68,316) reason codes had considerable higher averages than the EFA WEST overall average.

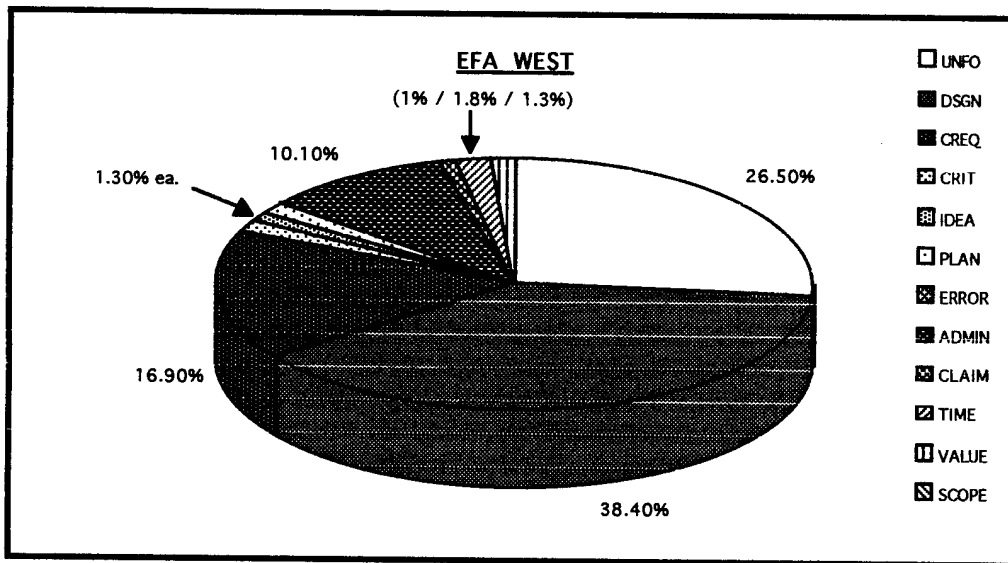


Figure 4.25: Distribution of Modifications by Reason Code

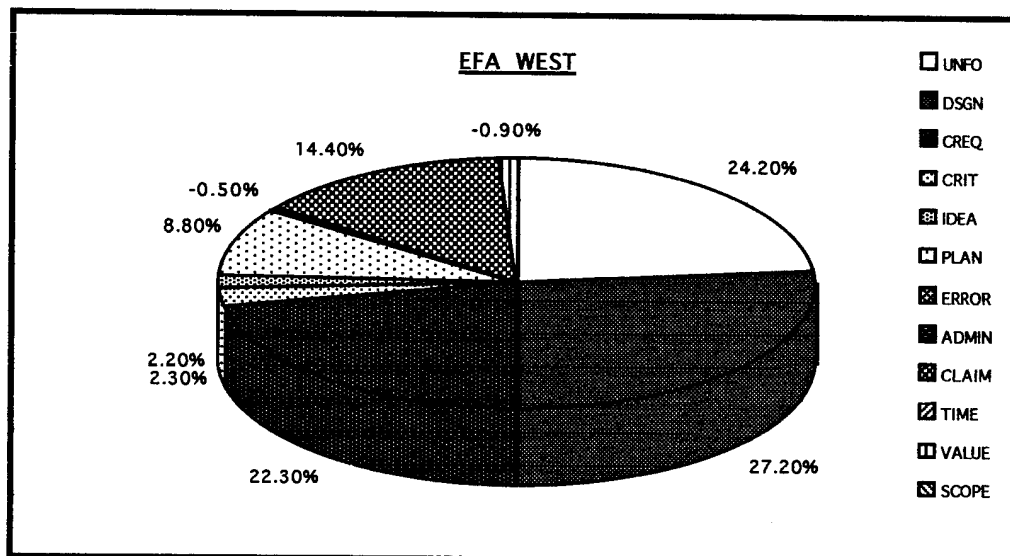


Figure 4.26: Percent Distribution of Cost by Reason Code

The distribution of the modifications by trade is shown in Table 14. The most common types of modifications involved the civil (25.5%) and electrical (17.1%) trades. In addition, almost 25% of the changes were attributed to information not available (12.7%) and administrative (11.2%) modifications. Approximately 50% of the total cost for all modifications was attributed to the civil (30.9%) and electrical (17.0%) trades. Also claims accounted for 14.6% of the total cost. Figures 4.27 and 4.28 show the percent distribution of these modifications by trade and its corresponding cost, respectively.

Trades	No. of Changes	% of Changes	Total Cost	% of Cost	Avg. Cost per Change
CIVIL	98	25.5%	\$1,194,433	30.9%	\$12,188
EARTHWORK	20	5.2%	\$219,870	5.7%	\$10,994
ELECTRICAL	66	17.1%	\$655,895	17.0%	\$9,938
HVAC	11	2.9%	\$59,044	1.5%	\$5,368
FINISHES	15	3.9%	\$76,118	2.0%	\$5,075
ROOFING	13	3.4%	\$109,088	2.8%	\$8,391
DEMOLITION	2	0.5%	\$5,214	0.1%	\$2,607
HAZ. WASTE	3	0.8%	\$59,997	1.6%	\$19,999
DOOR/WINDOW	15	3.9%	\$158,628	4.1%	\$10,575
PLUMBING	29	7.5%	\$192,004	5.0%	\$6,621
UTILITIES	3	0.8%	\$8,049	0.2%	\$2,683
ADMIN	43	11.2%	\$162,949	4.2%	\$3,790
EQUIPMENT	4	1.0%	\$26,421	0.7%	\$6,605
CLAIMS	5	1.3%	\$566,282	14.6%	\$113,256
EXT. OVHD	2	0.5%	\$19,272	0.5%	\$9,636
N/A	49	12.7%	\$356,260	9.2%	\$7,271
TIME	7	1.8%	\$0	0.0%	\$0
TOTALS	385	100.0%	\$3,869,524	100.0%	\$10,051

Table 14: EFA WEST's Modifications by Trade

Higher than average cost per modification were identified for claims (\$113,256) and hazardous waste (\$19,999) work.

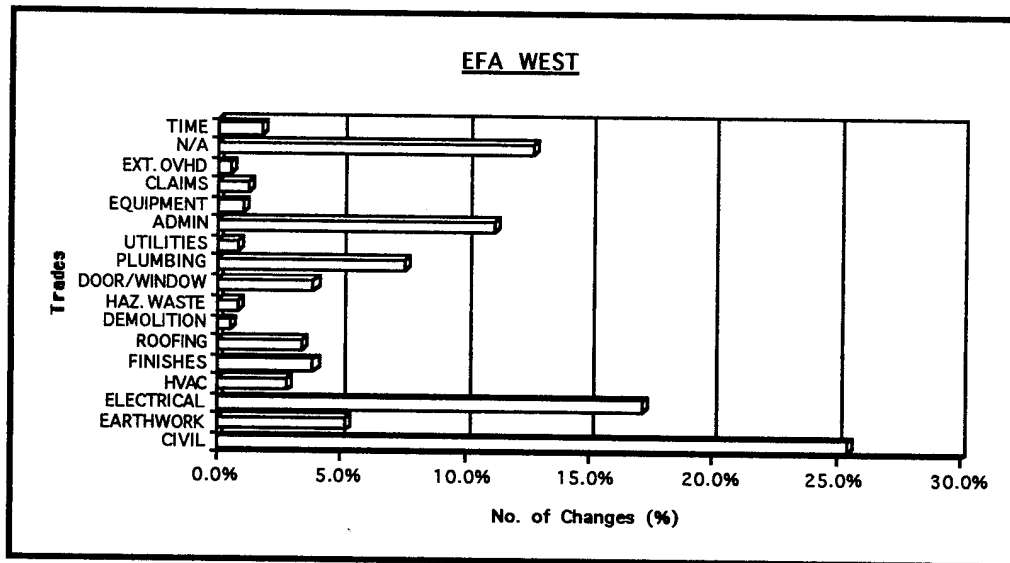


Figure 4.27: Distribution of Modifications by Trade

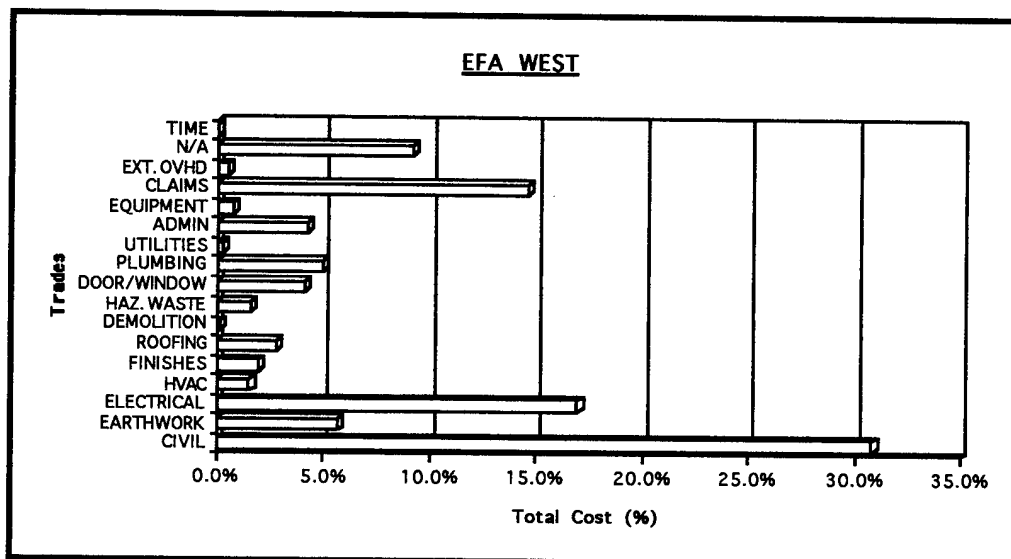


Figure 4.28: Percent Distribution of Cost by Trade

#### 4.2.8 EFA MIDWEST.

The EFA MIDWEST projects used for this study were valued at \$76,081,940. A total of 303 contract modifications totaling \$3,776,926 were issued against these projects. The average cost per modification was \$12,465. The average modification rate for the EFA MIDWEST projects was the second lowest at 4.96%.

The distribution of these modifications by reason code is shown in Table 15. The design (44.9%) and unforeseen (28.1%) codes were the most commonly assigned reason codes. In addition the criteria and administrative changes totaled almost 10% each of the total modifications. The design (35.6%), unforeseen (25.1%) and criteria (21.2%) changes made up most of the total cost for all modifications. Figures 4.29 and 4.30 show the percent distribution of these changes by reason code and its corresponding cost, respectively.

Reason Code	No. of Changes	% of Changes	Total Cost	% of Cost	Avg. Cost per Change
UNFO	85	28.1%	\$948,018	25.1%	\$11,153
DSGN	136	44.9%	1,343,474	35.6%	\$9,878
CREQ	2	0.7%	310,875	8.2%	\$155,438
CRIT	28	9.2%	802,280	21.2%	\$28,653
IDEA	0	0.0%	0	0.0%	\$0
PLAN	6	2.0%	266,919	7.1%	\$44,487
ERROR	4	1.3%	41,027	1.1%	\$10,257
ADMIN	29	9.6%	44,822	1.2%	\$1,546
CLAIM	4	1.3%	29,096	0.8%	\$7,274
TIME	4	1.3%	0	0.0%	\$0
VALUE	4	1.3%	(26,237)	-0.7%	(\$6,559)
SCOPE	1	0.3%	16,652	0.4%	\$16,652
<b>Totals</b>	<b>303</b>	<b>100%</b>	<b>\$3,776,926</b>	<b>100%</b>	<b>\$12,465</b>

Table 15: EFA WEST's Modifications by Reason Code

Modifications with significantly higher than the overall EFA MIDWEST average cost per modification included customer requested (\$155,438) and plan (\$44,487) changes.

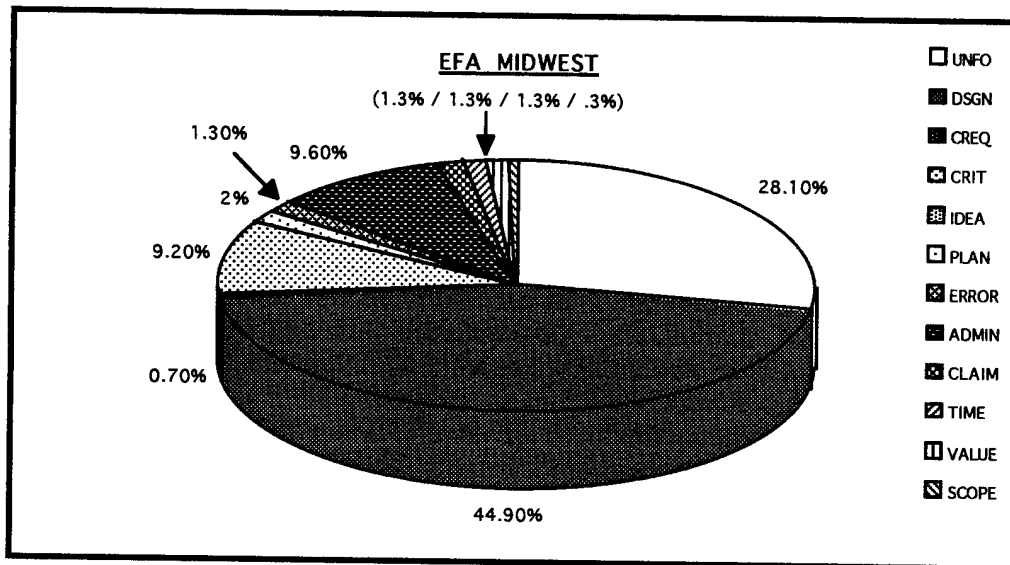


Figure 4.29: Distribution of Modifications by Reason Code

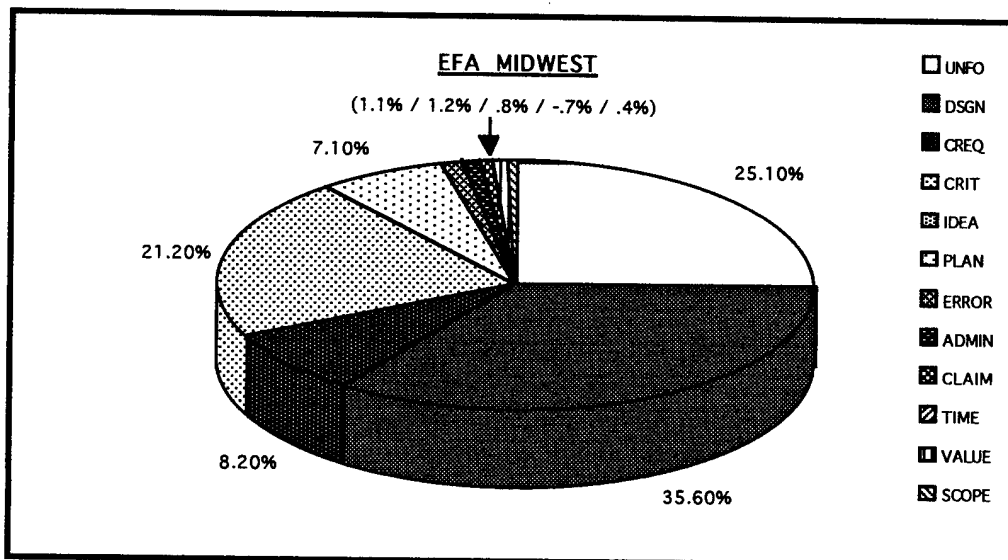


Figure 4.30: Percent Distribution of Cost by Reason Codes



The distribution of these modifications by trade is shown in Table 16. The civil (24.4%) and electrical (9.9%) trades were the most commonly involved trades in changes. In addition, administrative and changes where the information was not available (n/a) made up 10.9% each of the changes. A large portion of the total cost was made up by changes involving the civil (38.1%) and HVAC (10.9%) trades. Another 10.9% of the total cost could not be allocated to any of the other trades because of missing information. Figures 4.31 and 4.32 show the percent distribution of these changes by trade and its corresponding cost, respectively.

Trades	No. of Changes	% of Changes	Total Cost	% of Cost	Avg. Cost per Change
CIVIL	74	24.4%	\$1,437,698	38.1%	\$19,428
EARTHWORK	17	5.6%	\$203,470	5.4%	\$11,969
ELECTRICAL	30	9.9%	\$315,468	8.4%	\$10,516
HVAC	16	5.3%	\$409,917	10.9%	\$25,620
FINISHES	13	4.3%	\$122,317	3.2%	\$9,409
ROOFING	0	0.0%	\$0	0.0%	\$0
DEMOLITION	10	3.3%	\$74,677	2.0%	\$7,468
HAZ. WASTE	6	2.0%	\$209,330	5.5%	\$34,888
DOOR/WINDOW	10	3.3%	\$56,370	1.5%	\$5,637
PLUMBING	28	9.2%	\$215,061	5.7%	\$7,681
UTILITIES	14	4.6%	\$175,511	4.6%	\$12,537
ADMIN	33	10.9%	\$37,462	1.0%	\$1,135
EQUIPMENT	8	2.6%	\$28,841	0.8%	\$3,605
CLAIMS	3	1.0%	\$24,830	0.7%	\$8,277
EXT. OVHD	3	1.0%	\$55,406	1.5%	\$18,469
N/A	33	10.9%	\$410,568	10.9%	\$12,441
TIME	5	1.7%	\$0	0.0%	\$0
TOTALS	303	100.0%	\$3,776,926	100.0%	\$12,465

Table 16: EFA MIDWEST's Modifications by Trade

The hazardous waste removal (\$34,888) and HVAC (\$25,620) work had significantly higher cost per modification averages than the EFA MIDWEST overall average.

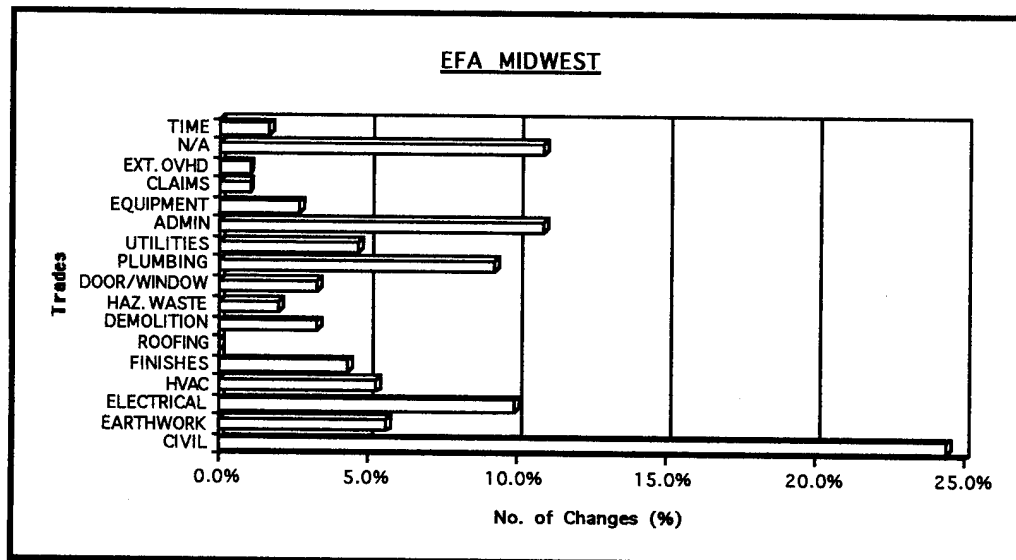


Figure 4.31: Distribution of Modifications by Trade

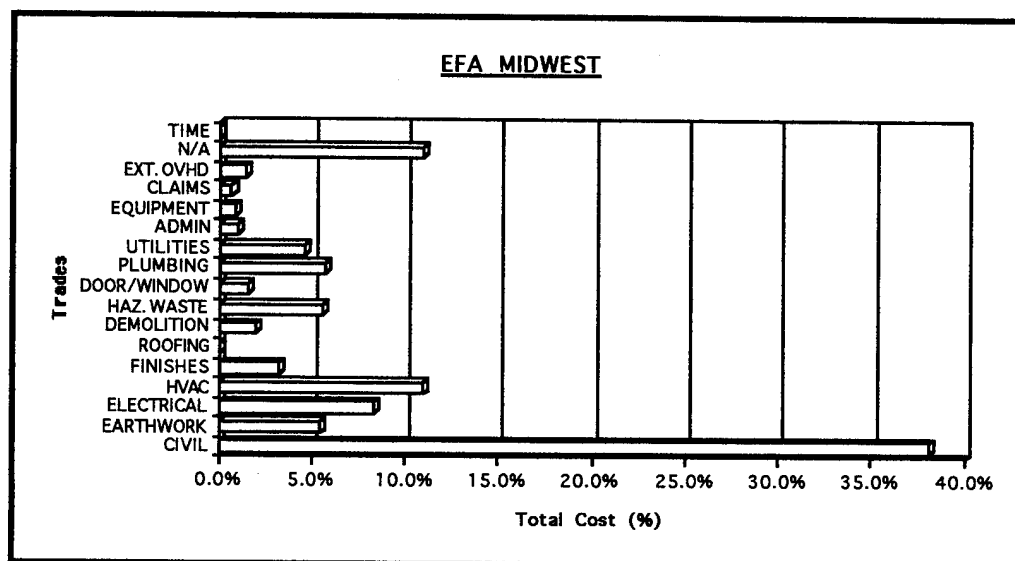


Figure 4.32: Percent Distribution of Cost by Trade

#### 4.2.9 EFA CHESAPEAKE.

The EFA CHESAPEAKE projects used for this study were valued at \$42,854,406. A total of 342 contract modifications valued at \$4,350,625 were issued against these contracts. The average cost per modification was \$12,721. At 10.15%, the average modification rate for EFA CHESAPEAKE's projects was the highest of all the EFD/EFA's analyzed.

The distribution of these modifications by reason code is shown in Table 17. Almost 90% of all modification were due to unforeseen (41.5%), design (35.4%) and customer requested (10.8%) changes. The total cost of all modifications was mostly accounted for by unforeseen (41.7%), design (36.1%) and customer requested (16.3%) changes. Figures 4.33 and 4.34 show the percent distribution of these modifications by reason code and its corresponding cost, respectively.

Reason Code	No. of Changes	% of Changes	Total Cost	% of Cost	Avg. Cost per Change
UNFO	142	41.5%	\$1,815,233	41.7%	\$12,783
DSGN	121	35.4%	1,572,209	36.1%	\$12,993
CREQ	37	10.8%	709,289	16.3%	\$19,170
CRIT	1	0.3%	4,117	0.1%	\$4,117
IDEA	0	0.0%	0	0.0%	\$0
PLAN	3	0.9%	58,545	1.3%	\$19,515
ERROR	9	2.6%	61,948	1.4%	\$6,883
ADMIN	24	7.0%	37,175	0.9%	\$1,549
CLAIM	1	0.3%	94,627	2.2%	\$94,627
TIME	3	0.9%	0	0.0%	\$0
VALUE	0	0.0%	0	0.0%	\$0
SCOPE	1	0.3%	(2,518)	-0.1%	(\$2,518)
Totals	342	100%	\$4,350,625	100%	\$12,721

Table 17: EFA CHESAPEAKE's Modifications by Reason Code

Only the claims (\$94,627) reason code had a significantly higher cost per modification average than the EFA CHESAPEAKE overall average.

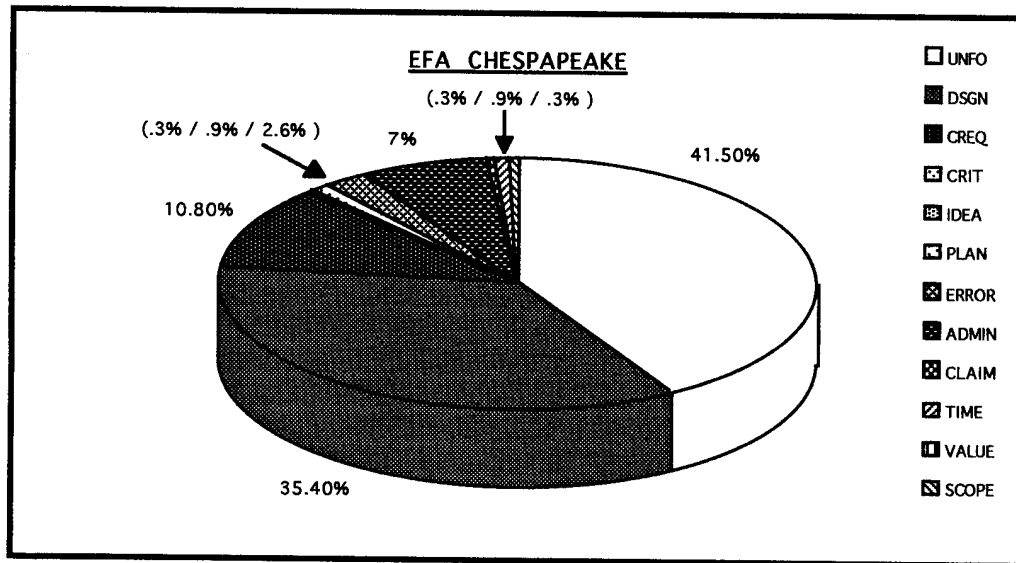


Figure 4.33: Distribution of Modifications by Reason Code

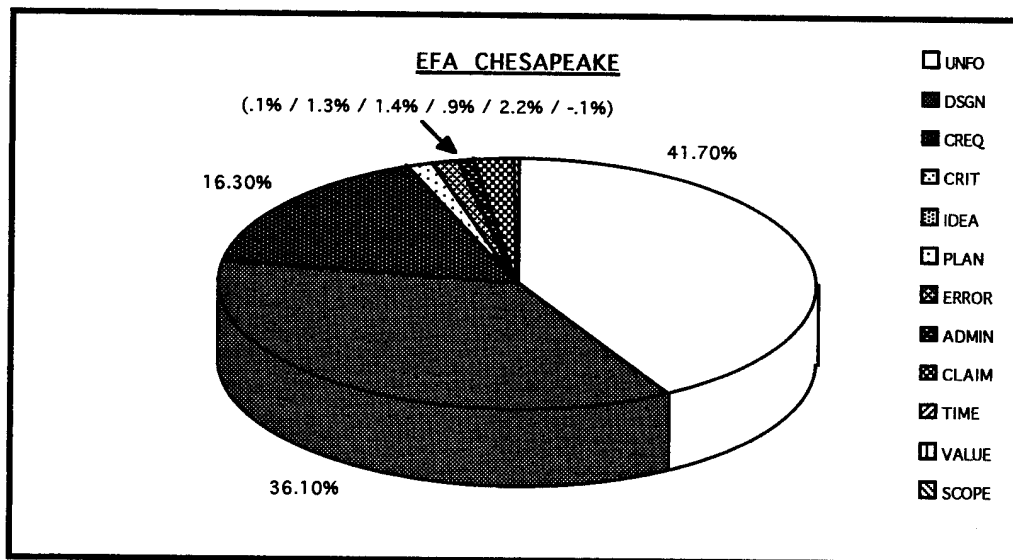


Figure 4.34: Percent Distribution of Cost by Reason Codes

The distribution of these modifications by trade is summarized in Table 18. The electrical (18.7%) and civil (18.1%) trades were involved in the majority of the modifications issued. The total cost of all modifications was attributed mostly to equipment installation (27.9%), civil (19.0%), electrical (14.1%) and hazardous waste removal (10.1%) work. Figures 4.35 and 4.36 show the percent distribution of these modifications by trade and its corresponding cost, respectively.

Trades	No. of Changes	% of Changes	Total Cost	% of Cost	Avg. Cost per Change
CIVIL	62	18.1%	\$826,065	19.0%	\$13,324
EARTHWORK	14	4.1%	\$142,310	3.3%	\$10,165
ELECTRICAL	64	18.7%	\$612,495	14.1%	\$9,570
HVAC	19	5.6%	\$145,722	3.3%	\$7,670
FINISHES	18	5.3%	\$115,001	2.6%	\$6,389
ROOFING	7	2.0%	\$44,390	1.0%	\$6,341
DEMOLITION	11	3.2%	\$61,774	1.4%	\$5,616
HAZ. WASTE	12	3.5%	\$439,360	10.1%	\$36,613
DOOR/WINDOW	14	4.1%	\$61,902	1.4%	\$4,422
PLUMBING	26	7.6%	\$202,985	4.7%	\$7,807
UTILITIES	23	6.7%	\$162,731	3.7%	\$7,075
ADMIN	24	7.0%	\$37,175	0.9%	\$1,549
EQUIPMENT	10	2.9%	\$1,215,601	27.9%	\$121,560
CLAIMS	1	0.3%	\$94,627	2.2%	\$94,627
EXT. OVHD	7	2.0%	\$75,326	1.7%	\$10,761
N/A	27	7.9%	\$113,161	2.6%	\$4,191
TIME	3	0.9%	\$0	0.0%	\$0
<b>TOTALS</b>	<b>342</b>	<b>100.0%</b>	<b>\$4,350,625</b>	<b>100.0%</b>	<b>\$12,721</b>

Table 18: EFA CHESAPEAKE's Modifications by Trade

Categories with significantly higher than average costs per modification than the EFA CHESAPEAKE overall average included equipment installation (\$121,560), claims (\$94,627) and hazardous waste removal work (\$36,613).

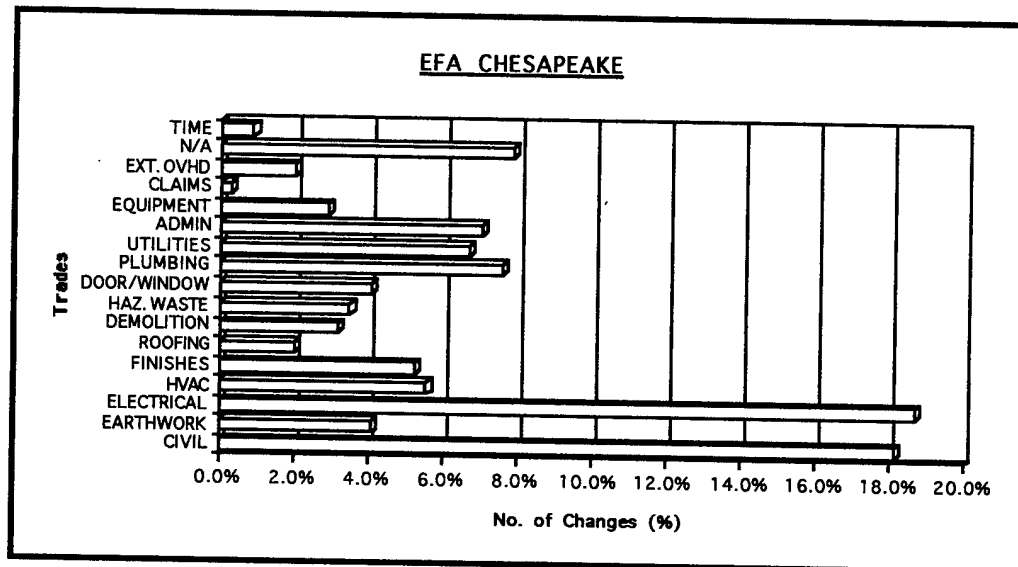


Figure 4.35: Distribution of Modifications by Trade

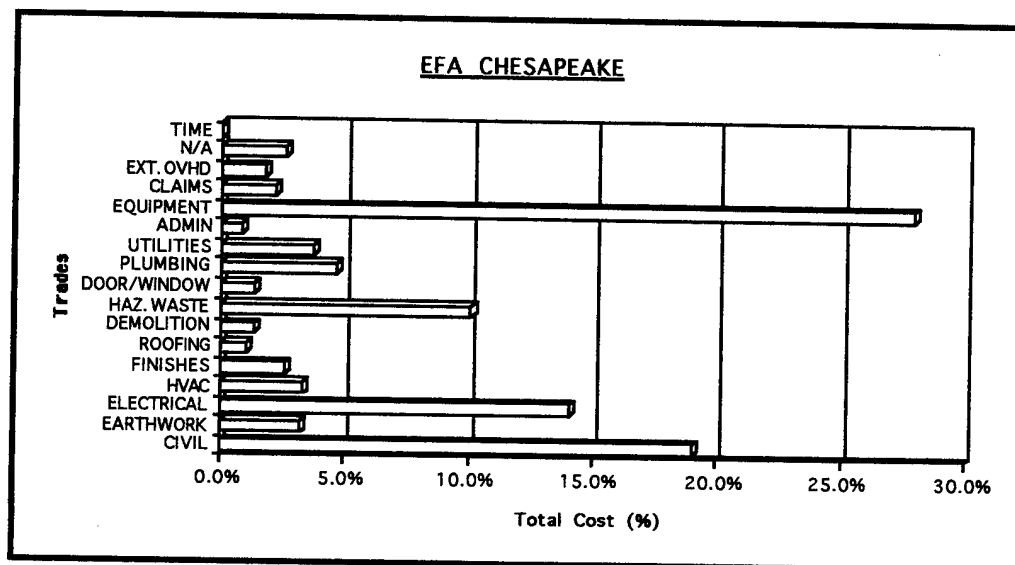


Figure 4.36: Percent Distribution of Cost by Trade

#### 4.2.10 EFA NORTHWEST.

The EFA NORTHWEST contracts used for this study were valued at \$77,586,694. A total of 442 contract modifications totaling \$5,146,450 were issued against these contracts. The average cost of these modifications was \$11,644. The average modification rate for EFA NORTHWEST's projects was 6.63%.

The distribution of these modifications by reason code is shown in Table 19. The reason codes design (50.2%), customer requested (20.1%) and unforeseen (14.7%) were the most commonly assigned to contract modifications. Customer requested changes (41.7%) followed by design (37.8%) and unforeseen (14.9%) changes accounted for almost 95% of the total cost for all modifications. Figures 4.37 and 4.38 show the percent distribution of these modifications by reason code and its corresponding cost, respectively.

Reason Code	No. of Changes	% of Changes	Total Cost	% of Cost	Avg. Cost per Change
UNFO	65	14.7%	\$766,559	14.9%	\$11,793
DSGN	222	50.2%	1,947,527	37.8%	\$8,773
CREQ	89	20.1%	2,144,371	41.7%	\$24,094
CRIT	21	4.8%	37,730	0.7%	\$1,797
IDEA	1	0.2%	(7,452)	-0.1%	(\$7,452)
PLAN	7	1.6%	124,187	2.4%	\$17,741
ERROR	3	0.7%	8,336	0.2%	\$2,779
ADMIN	25	5.7%	(15,189)	-0.3%	(\$608)
CLAIM	5	1.1%	145,919	2.8%	\$29,184
TIME	3	0.7%	638	0.0%	\$213
VALUE	1	0.2%	(6,176)	-0.1%	(\$6,176)
SCOPE	0	0.0%	0	0.0%	\$0
Totals	442	100%	\$5,146,450	100%	\$11,644

Table 19: EFA NORTHWEST's Modifications by Reason Code

Modifications with the reason codes claim (\$29,184) and customer requested (\$24,094) exceeded the overall cost per modification average for EFA NORTHWEST's projects.

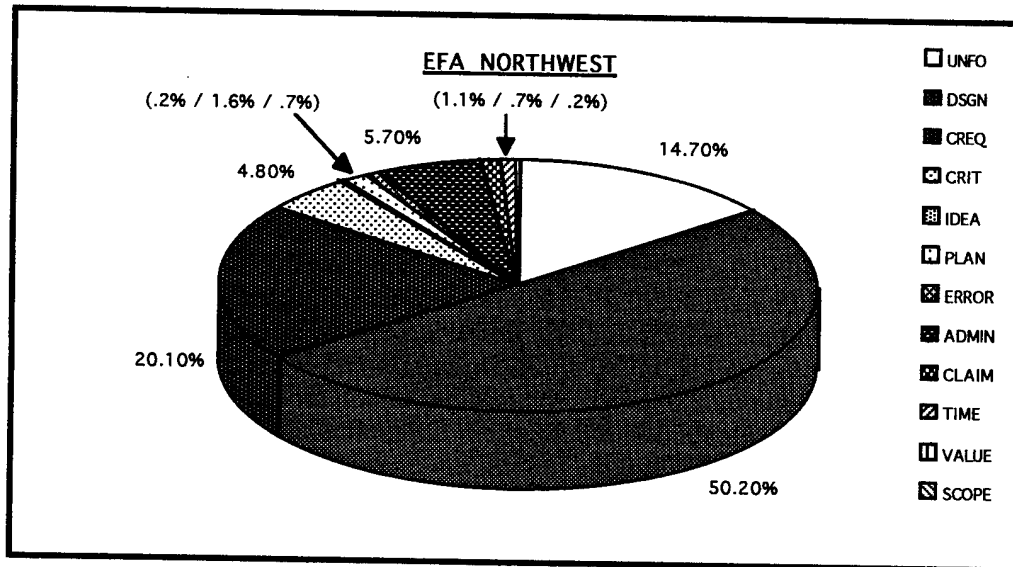


Figure 4.37: Distribution of Modifications by Reason Code

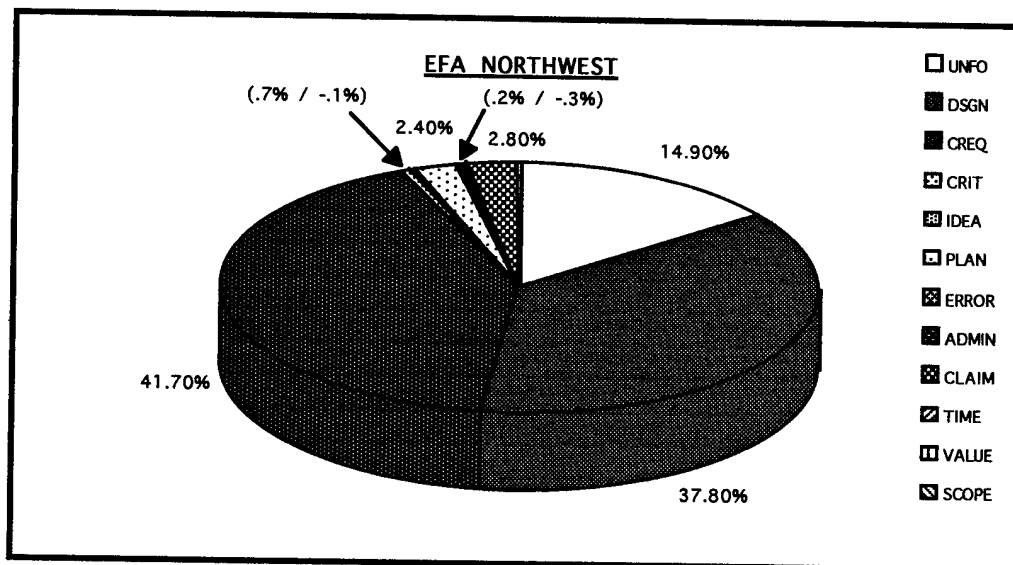


Figure 4.38: Percent Distribution of Cost by Reason Code



The distribution of these modifications by trade is summarized in Table 20. From this table, changes involving the civil (25.6%), electrical (17.0%) and finishes (10.0%) trades were the most frequent. The civil (54.3%) and equipment installation (11.0%) trades made up approximately 65% of the total cost. The remaining 35% was very well distributed between the remaining trades. Figures 4.39 and 4.40 show the percent distribution of these modifications by trade and its corresponding cost, respectively.

Trades	No. of Changes	% of Changes	Total Cost	% of Cost	Avg. Cost per Change
CIVIL	113	25.6%	\$2,793,332	54.3%	\$24,720
EARTHWORK	15	3.4%	\$158,922	3.1%	\$10,595
ELECTRICAL	75	17.0%	\$439,908	8.5%	\$5,865
HVAC	23	5.2%	\$150,854	2.9%	\$6,559
FINISHES	44	10.0%	\$128,841	2.5%	\$2,928
ROOFING	5	1.1%	\$29,037	0.6%	\$5,807
DEMOLITION	5	1.1%	\$12,989	0.3%	\$2,598
HAZ. WASTE	5	1.1%	\$207,326	4.0%	\$41,465
DOOR/WINDOW	19	4.3%	\$72,866	1.4%	\$3,835
PLUMBING	26	5.9%	\$129,389	2.5%	\$4,977
UTILITIES	28	6.3%	\$91,660	1.8%	\$3,274
ADMIN	40	9.0%	\$72,337	1.4%	\$1,808
EQUIPMENT	6	1.4%	\$567,772	11.0%	\$94,629
CLAIMS	2	0.5%	\$140,927	2.7%	\$70,464
EXT. OVHD	2	0.5%	\$7,027	0.1%	\$3,514
N/A	30	6.8%	\$142,625	2.8%	\$4,754
TIME	4	0.9%	\$638	0.0%	\$160
TOTALS	442	100.0%	\$5,146,450	100.0%	\$11,644

Table 20: EFA NORTHWEST's Modifications by Trade

Four categories of changes had cost per modification averages that exceeded EFA NORTHWEST's overall average. These included equipment installation (\$94,629), claims (\$70,464), hazardous waste removal (\$41,465) and civil work (\$24,720).

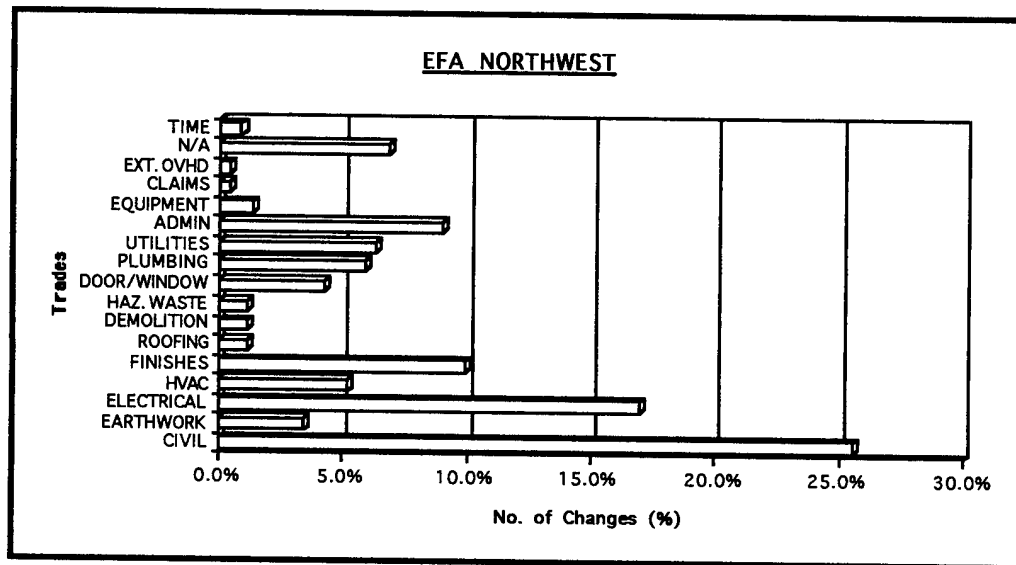


Figure 4.39: Distribution of Modifications by Trade

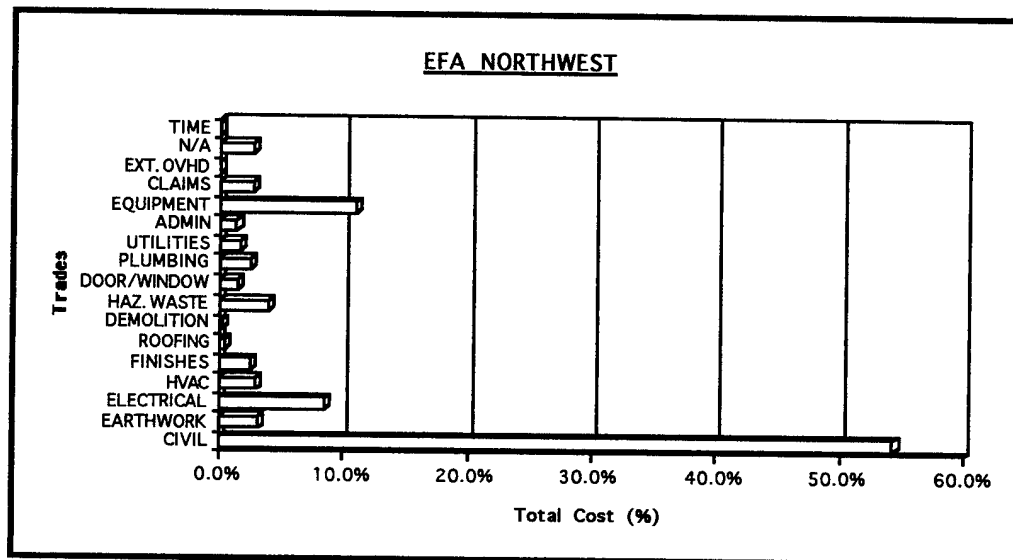


Figure 4.40: Percent Distribution of Cost by Trade

#### 4.3 Relationship Between the Type of Facility and the Project's Modification Rate.

The second purpose of this thesis was to analyze the relationship between the Facility Category Codes and the project's modification rate. To perform the analysis the 135 projects were first sorted using the Navy's Facility Category Codes discussed in Appendix A. Then the modification rate for each one of the categories was calculated. A spreadsheet showing this sort is included as Appendix D. The results of this analysis are summarized on Table 21.

Since the projects were randomly selected, an even distribution of projects among the different facility category codes was not achieved. Only facility categories with 10 or more representative projects were considered to have sufficient data to make the analysis reliable. The following categories of facilities did not meet this criteria and therefore the relationship between them and their respective modification rate could not be established: Production (1), RDT&E (7), Supply (9), Medical (4), Family Housing (2) and Site Improvements (1).

Taking NAVFAC's average modification rate of 6.07% as the norm, the following observations are made. First, Operational facilities had the highest average modification rate at 11.41%. They were followed by Utility Improvements (9.15%) and Training (7.13%) facilities. At 6.67%, the Administrative facilities had an average modification rate slightly higher than the NAVFAC average. Facility types with average modification rates well below NAVFAC's average included Maintenance (4.56%) and

Facility Type	LANTDIV	SOUTHDIV	NORTHDIV	PACDIV	SOUTHWESTDIV	EFA WEST	EFA MIDWEST	EFA CHESAPEAKE	EFA NORTHWEST	Totals	Modification Rate (%)
Operational	2	1	1	3	3	1	1	1	2	15	11.41%
Training	2	3	1	0	2	2	2	1	0	13	7.13%
Maintenance	6	4	1	4	4	0	4	3	0	26	4.56%
Production	0	0	0	0	0	0	0	1	0	1	8.47%
RDT & E	0	0	1	0	1	2	0	3	0	7	6.90%
Supply	0	0	1	0	2	3	1	0	2	9	5.04%
Medical	0	1	0	2	0	0	0	0	1	4	1.82%
Administrative	2	1	4	1	0	1	2	3	1	15	6.67%
Family Hsg	0	0	1	0	0	0	1	0	0	2	1.69%
Personnel Hsg.	1	3	1	0	1	3	3	1	2	15	3.79%
Community	1	2	1	2	2	2	1	0	3	14	4.46%
Utilities Improv	1	0	3	3	0	1	0	2	3	13	9.15%
Site Improv.	0	0	0	0	0	0	0	0	1	1	7.17%
Totals										135	

Table 21: Distribution of Contracts by Facility Category Codes

Community (4.46%) facilities. Finally, the facility category code with the lowest average modification rate was Personnel Housing (3.79%). Figure 4.41 summarizes these observations.

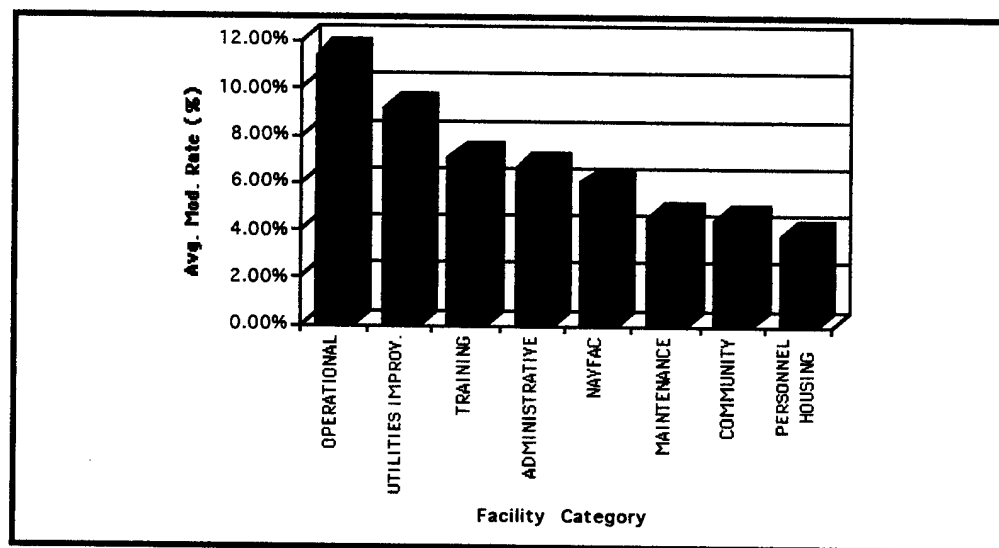


Figure 4.41: Avg. Modification Rate by Facility Category

## Chapter 5

### Conclusions

This chapter discussed the major conclusions reached based on the analysis performed in the previous chapter. Emphasis was placed in comparing the individual performance of each EFD/EFA's in major area such as claims, value engineering , scope changes, and A-E liability modifications. In addition, the individual EFD/EFA's performance compared to the overall NAVFAC performance is addressed. Specific conclusion are as follows:

#### Reason Codes Analysis:

- The single greatest number of modifications issued by most of the EFD/EFA's, except for PACDIV and EFA CHESAPEAKE where unforeseen modifications were the most common, were due to design errors or omissions. These design modifications accounted for approximately 40% of all modifications issued and 31% of the total cost for all changes issued in the 135 contracts analyzed. EFA NORTHWEST (50.2%) and SOUTHWESTDIV (47.0%) had the highest percentages of this type of modifications.
- Despite the high number of design related modifications, the A-E of record was held financially liable for only approximately 1% of the changes. SOUTHDIV was the most aggressive in pursuing A-E liability, at 3% of all modifications issued, for the cost of design related modifications.
- Unforeseen conditions (28.3%) were the second leading cause for modifications accounting for 31.8% of the total cost for all modifications issued by NAVFAC. SOUTHDIV and EFA CHESAPEAKE had the highest percentages of this type of modifications at 45.8% and 41.5%, respectively. NORTHDIV's

spent 46.9% of its total cost for all modifications on unforeseen related changes.

- Overall customer requested changes were responsible for 11.5% of all modifications issued and accounted for 19.1% of the total cost. EFA NORTHWEST led all EFD/EFA's in customer requested changes with 20.1% of all its changes being attributed to this type of modifications. In addition, these modifications accounted for 41.7% of the cost of all modifications issued by EFA NORTHWEST. This cost percentage was by far the highest of all EFD/EFA's.
- NAVFAC wide claim related modifications numbered 1% of all modifications issued and accounted for 3.4% of the total cost. The Navy paid an average of \$41,324 per claim. LANTDIV had the highest percentage of claim related modifications at 1.9% of all its modifications. EFA WEST had the highest percentage of total cost allocated to cover claim related modifications at 14.4% of the total cost and also had the highest cost per modification at \$139,051.
- NAVFAC wide Value Engineering (VE) changes averaged 1% of all modifications issued and accounted for savings of 1.2% of the total cost. With 3.4% of all modifications issued involving VE modifications, PACDIV had the most active VE program. In addition, NORTHDIV's VE program produced the largest savings at 5.1% of the total cost.
- Scope changes are very uncommon and expensive modifications in Navy contract and that was reflected in the NAVFAC wide analysis (.4% of all changes and .9 % of total cost). The average scope modification costs the Navy \$24,357. SOUTHWESTDIV led all EFD/EFA's in both number (2%) and total cost allocated (9.7%) to scope modifications. SOUTHWESTDIV also had the highest average cost per scope modification at \$40,315.

- Overall NAVFAC spent an average of \$11,583 per modification. SOUTHDIV had the lowest average cost per modification at \$7,278 per change. On the other hand, PACDIV had the highest average at \$16,217 per modification.

#### Trade Analysis:

- Except for changes issued by EFA CHESAPEAKE and NORTHDIV where electrical changes were the most common, civil/structural related changes were the single most common trade involved in modification issued by NAVFAC (22%). At 30.7% of all changes, SOUTHDIV had the highest percentage of civil changes.
- Civil changes (27.1%), followed by electrical (13.1%) and earthwork (10.1%) related modifications compromised approximately 50% of the total cost of all modifications issued.
- NAVFAC wide extended overhead modifications compromised 1.4% of all changes and 2.9% of the total cost. PACDIV had the highest percentage of extended overhead modifications at 3.4%. NORTHDIV and SOUTHDIV spent 7.8% of the total cost for all modifications issued in this category.
- After claims, modifications involving the installation of equipment had the highest cost per modification at \$36,645. EFA CHESAPEAKE spent an average of \$121,560 per equipment installation modification.
- NAVFAC wide hazardous waste removal work was another expensive type of work at \$26,342 per modification. EFA NORTHWEST had the single highest average cost (\$41,465) for this type of work. EFA CHESAPEAKE had the highest percentage of hazardous waste work related modifications at 3.5%.



Project Modification Rates and Facility Codes:

- NAVFAC wide the average modification rate for the 135 projects analyzed was calculated at 6.07%. EFD/EFA's with the lowest and highest modifications rates were SOUTHDIV (3.95%) and EFA CHESAPEAKE (10.15%), respectively
- A relationship did exist between the complexity of the work, the facility type and the project's modification rate. Personnel Housing facilities that usually involve repetitive work, standard room size, standard configurations and sometime use the same design for different locations had the lowest modification rate at 3.79% of the total installed cost.
- In operational facilities where requirements and missions changes are common occurrences, the average modification rate was the highest at 11.41% of the total installed cost. Keeping in mind that a MILCON project takes approximately 4 years to be approved and constructed it is easily understood how a project designed 3 or 4 years ago may or may not meet the present day requirements.
- Utilities improvement projects, where many subsurface condition may be unknown, also had a high modification rate at 9.15% of the total cost.

## Chapter 6

### Recommendations

1. Since design related changes due to design errors or omissions are responsible for a great majority of all modifications issued, better and more thorough constructibility review must be performed. The ROICC offices need to have adequate time to perform quality reviews. In addition, only experienced personnel should be used to perform these reviews.
2. An alternative or in addition to having the ROICC offices perform the constructibility reviews, the Navy might consider the possibility of hiring constructibility consultants to perform these reviews. The potentials savings derived from identifying conflicts in plans, specifications and site conditions before contract award should, at least in complex projects, justify the additional expenditure.
3. There is a need to provide standardize constructibility review training to all those involved in the process. A lessons learned data base should be created that includes the most common types of changes encountered in typical facilities.
4. When performing constructibility reviews, emphasis should be placed on checking the civil and electrical related work. These trades were involved in approximately 37% of all modifications issued.
5. The A-E of record should be required to become familiar with the site instead of relying on Government as-built drawings to perform the design. This practice should reduce the number of

unforeseen changes, which are the second major reason for changes in the contracts analyzed.

6. Where warranted, the Navy's needs to become more aggressive in pursuing A-E liability cases for design error and omissions. The A-E of records needs to understand that he/she will be held financially liable for his/her design oversights.

7. One suggestion for improving the quality of design services would be to develop a compensation plan that allows the A-E to earn a higher fee based on the quality of his/her design

8. The Value Engineering program is an excellent vehicle for savings in Government contracts. Except for PACDIV, the Navy is not taking full advantage of this program. NAVFAC needs to become more active in ensuring the widest implementation of this program at all the EFD/EFA's.

9. The Navy should continue to discourage scope modifications once a contract is awarded. These modifications are expensive and usually involve extensive redesign effort that can delay the project and bring about extended overhead charges.

10. Although only a small percentage of changes are due to claims, these modifications are the most expensive to settle. The Navy needs to continue to pursue alternative dispute resolution methods to settle claims. In addition, the practice of encouraging the settlement of claims at the lowest levels should continue.

11. When budgeting for contingency costs, such as for modifications, attention should be placed to the type of facility being proposed and budget accordingly. The practice of budgeting

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-  
a flat percentage for contingencies for all projects should be discouraged.

12. A separate analysis on the trades most commonly involved in modifications by facility type should be performed. This analysis would shed additional light on the relationship between the facility type and the project's modification rate. In addition, it would help focus attention on areas of concern during the design and constructibility review of a project.

## Appendices

## Appendix A

### Navy Facility Category Codes

Land assigned to any one of the Armed Services is considered Military Real Property, class 1. All other real property items so assigned or constructed on or in the land (buildings, structures and utilities) are considered Military Real Property, class 2. Every reportable item of real property, be it class 1 or 2, is considered a facility.

Department of Defense (DOD) regulations require the categorizing, within property classes 1 and 2, of all Military Real Property and prescribes a structured series of Basic Facility Categories for that purpose. One series of codes (the 900 series) is applicable only to class 1 property. The code includes the nature, degree and type of U.S. Government's interest (permanent, temporary, fee title, lease, permit, etc.) in the land and the method by which that interest was acquired. Eight other series of codes (the 100 through 800 series) are applicable only to class 2 and, unlike the 900 series, are indicative of the use made of the class 2 property. The Facility Categories used for this research are shown in Table A.1.

Basic Category	Facility Type
111XX through 149XX	Operational Facilities
150XX through 169XX	Waterfront Facilities
170XX through 179XX	Training Facilities
210XX through 219XX	Maintenance Facilities
220XX through 229XX	Production Facilities
300XX through 390XX	RDT&E Facilities
400XX through 451XX	Supply Facilities
500XX through 550XX	Hospitals, Medical, Dental
600XX through 690XX	Administrative Facilities
711XX through 714XX	Family Housing Facilities
720XX through 725XX	Unaccompanied Personnel Hsng,
730XX through 750XX	Community Facilities
760XX	Museums and Memorials
800XX through 890XX	Utilities and Grounds Improv.
910XX through 923XX	Land, Owned or Integrated
930XX through 939XX	Site Improvements

Table A.1: Facility Category Codes

The Category Codes shown above have been developed on the structured base of a five digit code. The first three digit indicate DoD specified Facility Classes, Category Groups and Basic Categories. The fourth and fifth digits have been added to identify specific Navy facilities within the DoD Basic Categories.

## Appendix B

### Contract Modifications Reason Codes

The following reason codes are used by the Navy to categorize the different types of modifications:

a. UNFO: (Unforeseen) This code is used for modifications that are a result of unforeseen conditions. These conditions can be caused by a different site condition or other unexpected problems.

b. DSGN: (Design) This reason code is used for contract modifications that are a result of a design error or omission. This codes is used when the A-E is not liable for the cost of the modification.

c. CREQ: (Customer Requested) This code is associated with scope amendments to accommodate revised or new functional requirements of the facility. The customer is usually the originator of these types of modifications.

d. CRIT: (Criteria) This type of modification is associated with an in-scope amendment to accommodate revised or new building, utility or construction criteria, which does not relate to functional aspects of the project.

e. IDEA: (Idea) This code is used for modifications that are a result ingenious or innovative ideas to perform the required work. This is not to be confused with a formal Value Engineering proposals.

f. PLAN: (Plan) This code refer to those changes that, prior to or at the time of award, have been pre-planned to be handled



as modifications due to the nature of the work involved or to take advantage of an option beneficial to the Government.

g. ERROR: (Error) This code is used in conjunction with modifications that were a result of design errors and/or omissions. In this case the A-E has been found liable for the cost of the modification.

h. ADMIN: (Administrative) Modifications that involve no cost on a net basis or changes to accounting or contract data.

i. CLAIM: (Claim) Self explanatory.

j. TIME: (Time Extension) Code used to compensate the contractor for time delays.

k. VALUE: (Value Engineering) Credit modifications reflecting savings resulting from redesign to incorporate the result of VE studies.

l. SCOPE: (Scope) Code used when additional scope is added to the contract. This does not cover scope which was not included due to omission by the Government.

## Appendix C

### Contract Modifications Checklist

The purpose of this checklist is to assure that every modification or claim is adequately documented. Each box must be checked or indicated N/A and shall have in this modification/claim file the documentation required for the box. The modification/claim file must show the complete record of all actions and data from the start of a potential modification/claim through final conclusion or disposition.

The ROICC and AROICC are responsible for the completion of each modification file.

1. \_\_\_\_ Origin of the Modification (i.e., customer request, RFI from contractor, A-E request, ROICC, etc.)
2. \_\_\_\_ Review Modification (i.e., copies of letters, memorandum to file, telephone calls, engineering comments, etc.)
3. \_\_\_\_ RFP and related RFP's
4. \_\_\_\_ A-E comments, if needed (i.e., reports, letters, memos, etc.)
5. \_\_\_\_ Customer comments, if needed (i.e., letters, memos, records of telephone calls, etc.)
6. \_\_\_\_ Government Estimate Date \_\_\_\_
7. \_\_\_\_ Fund Reservation Number \_\_\_\_

8. \_\_\_\_ Unfinalizing Unilateral Change Order Date \_\_\_\_
9. \_\_\_\_ Contractor Proposal Received Date \_\_\_\_
10. \_\_\_\_ Is A-E liable? YES\_\_\_\_ NO\_\_\_\_ (i.e., letters, memos, reports; stating reasons, etc.)
11. \_\_\_\_ Notify Contractor of Negotiation Meeting
12. \_\_\_\_ Notify A-E of Negotiation Meeting, if A-E is liable
13. \_\_\_\_ Photographs in the File
14. \_\_\_\_ Negotiation Date \_\_\_\_
15. \_\_\_\_ Send Copy of Minutes to Contractor. Date \_\_\_\_
16. \_\_\_\_ Reserve Additional Funds, if needed. Date and Fund Reservation \_\_\_\_
17. \_\_\_\_ Negotiation Memorandum or Business Clearance Completed \_\_\_\_
18. \_\_\_\_ Copy of Approved Business Clearance
19. \_\_\_\_ Copy of Formal Modification
20. \_\_\_\_ Other Information
21. \_\_\_\_ Retire File

**Appendix D**

**Modification Rates by Facility Category**

EFFD/EFA	PROJECT #	FACILITY TYPE (CAT. CODE)	AWARD AMOUNT (\$)	TOTAL MODS. (\$)	MODIFICATION RATE (%)
LANTDIV	88-8174	ADMINISTRATIVE	\$1,437,682	\$96,546	6.72%
LANTDIV	89-9075	ADMINISTRATIVE	\$2,385,131	\$59,008	2.47%
EFA NORTH	87-0041	ADMINISTRATIVE	\$1,937,414	\$152,606	7.88%
EFA NORTH	81-0392	ADMINISTRATIVE	\$11,250,000	\$862,716	7.67%
EFA NORTH	87-0025	ADMINISTRATIVE	\$3,874,100	\$155,719	4.02%
EFA NORTH	85-0004	ADMINISTRATIVE	\$1,433,000	\$382,727	26.71%
EFA WEST	89-0782	ADMINISTRATIVE	\$1,128,651	\$130,741	11.58%
SOUTHDIV	86-0727	ADMINISTRATIVE	\$1,705,500	\$189,973	11.14%
EFA MIDWEST	85-0167	ADMINISTRATIVE	\$3,066,650	(\$3,684)	-0.12%
EFA MIDWEST	84-0252	ADMINISTRATIVE	\$2,852,000	\$36,572	1.28%
EFA CHESAPEAKE	85-0106	ADMINISTRATIVE	\$1,733,000	\$61,427	3.54%
EFA CHESAPEAKE	86-0031	ADMINISTRATIVE	\$2,100,421	\$411,248	19.58%
EFA CHESAPEAKE	86-0276	ADMINISTRATIVE	\$4,090,000	\$85,272	2.08%
PACDIV	85-1463	ADMINISTRATIVE	\$1,869,000	\$57,564	3.08%
EFA NORTHWEST	94-7436	ADMINISTRATIVE	\$2,618,000	\$223,417	8.53%
		TOTALS	\$43,480,549	\$2,901,852	6.67%
EFA WEST	87-7667	COMMUNITY	\$2,893,000	\$23,021	0.80%
SOUTHWESTDIV	91-0187	COMMUNITY	\$1,668,800	\$214,483	12.85%
SOUTHWESTDIV	87-8829	COMMUNITY	\$1,920,000	\$153,106	7.97%
EFA NORTHWEST	93-2142	COMMUNITY	\$2,127,435	\$52,891	2.49%
EFA NORTHWEST	88-3283	COMMUNITY	\$2,896,000	\$58,835	2.03%
EFA NORTHWEST	87-7630	COMMUNITY	\$21,124,000	\$379,814	1.80%
EFA NORTH	84-0355	COMMUNITY	\$1,167,000	\$31,172	2.67%
EFA WEST	89-7107	COMMUNITY	\$3,574,000	\$575,742	16.11%
SOUTHDIV	83-0232	COMMUNITY	\$2,957,500	\$69,624	2.35%
SOUTHDIV	89-0173	COMMUNITY	\$3,287,000	\$215,966	6.57%
EFA MIDWEST	88-0056	COMMUNITY	\$2,283,612	\$226,698	9.93%
PACDIV	87-1302	COMMUNITY	\$2,166,900	\$68,445	3.16%
PACDIV	85-1462	COMMUNITY	\$1,937,499	\$92,220	4.76%
LANTDIV	88-0062	COMMUNITY	\$1,108,675	\$118,067	10.65%
		TOTALS	\$51,111,421	\$2,280,084	4.46%
SOUTHDIV	85-5224	MAINTENANCE	\$6,853,122	\$560,143	8.17%
LANTDIV	90-0179	MAINTENANCE	\$1,326,800	\$121,204	9.14%
LANTDIV	88-8279	MAINTENANCE	\$4,621,669	\$304,755	6.59%
LANTDIV	90-0102	MAINTENANCE	\$6,190,000	\$180,437	2.91%
LANTDIV	89-9160	MAINTENANCE	\$4,711,711	\$466,618	9.90%
LANTDIV	88-8085	MAINTENANCE	\$2,914,090	\$408,699	14.02%
LANTDIV	87-0356	MAINTENANCE	\$1,167,000	\$124,303	10.65%
EFA NORTH	87-0013	MAINTENANCE	\$1,538,000	\$37,644	2.45%
SOUTHDIV	86-0112	MAINTENANCE	\$7,149,000	\$273,164	3.82%
SOUTHDIV	86-0725	MAINTENANCE	\$3,193,237	\$179,227	5.61%
SOUTHDIV	86-0491	MAINTENANCE	\$3,885,000	\$89,821	2.31%
EFA MIDWEST	84-0518	MAINTENANCE	\$3,110,917	\$144,576	4.65%
EFA MIDWEST	87-0071	MAINTENANCE	\$6,950,000	\$513,707	7.39%
EFA MIDWEST	85-0078	MAINTENANCE	\$4,928,714	\$164,134	3.33%
EFA MIDWEST	86-0023	MAINTENANCE	\$5,757,510	\$712,540	12.38%
EFA CHESAPEAKE	85-0119	MAINTENANCE	\$3,956,000	\$292,341	7.39%
EFA CHESAPEAKE	85-0127	MAINTENANCE	\$1,938,000	\$40,090	2.07%
EFA CHESAPEAKE	89-1375	MAINTENANCE	\$7,744,838	\$993,145	12.82%
PACDIV	88-1317	MAINTENANCE	\$4,869,345	(\$781,707)	-16.05%
PACDIV	88-1319	MAINTENANCE	\$5,327,600	\$18,425	0.35%
PACDIV	85-1335	MAINTENANCE	\$5,773,945	\$146,024	2.53%
PACDIV	83-2440	MAINTENANCE	\$4,367,000	\$202,326	4.63%
SOUTHWESTDIV	84-4330	MAINTENANCE	\$9,549,401	\$140,054	1.47%
SOUTHWESTDIV	86-0149	MAINTENANCE	\$9,739,000	\$88,805	0.91%
SOUTHWESTDIV	87-7868	MAINTENANCE	\$1,443,421	\$33,962	2.35%
SOUTHWESTDIV	92-3516	MAINTENANCE	\$1,146,000	\$20,222	1.76%
		TOTALS	\$120,151,320	\$5,474,659	4.56%

EFFD/EFA	PROJECT #	FACILITY TYPE (CAT. CODE)	AWARD AMOUNT (\$)	TOTAL MODS. (\$)	MODIFICATION RATE (%)
EFA NORTHWEST	86-0016	MEDICAL	\$2,909,800	\$218,309	7.50%
SOUTH DIV	85-1350	MEDICAL	\$6,744,500	\$54,803	0.81%
PAC DIV	86-0255	MEDICAL	\$9,377,000	\$69,620	0.74%
PAC DIV	90-1469	MEDICAL	\$1,870,426	\$36,720	1.96%
		TOTALS	\$20,901,726	\$379,452	1.82%
EFA WEST	85-5356	OPERATIONAL	\$5,143,906	\$721,059	14.02%
LANT DIV	81-1481	OPERATIONAL	\$3,302,500	\$65,422	1.98%
LANT DIV	85-0099	OPERATIONAL	\$1,679,888	\$492,564	29.32%
EFA NORTH	81-0673	OPERATIONAL	\$4,799,000	\$577,979	12.04%
SOUTH DIV	87-0075	OPERATIONAL	\$3,344,608	\$206,268	6.17%
EFA MIDWEST	86-0067	OPERATIONAL	\$2,810,000	\$859,326	30.58%
EFA CHESAPEAKE	85-1376	OPERATIONAL	\$10,449,000	\$2,054,353	19.66%
PAC DIV	85-1363	OPERATIONAL	\$2,229,150	\$206,631	9.27%
PAC DIV	85-1333	OPERATIONAL	\$8,000,591	\$189,718	2.37%
PAC DIV	85-5164	OPERATIONAL	\$1,891,580	\$85,868	4.54%
SOUTHWEST DIV	85-5275	OPERATIONAL	\$2,443,637	\$20,953	0.86%
SOUTHWEST DIV	85-5318	OPERATIONAL	\$1,514,539	\$46,165	3.05%
SOUTHWEST DIV	94-7339	OPERATIONAL	\$3,373,000	\$1,529,024	45.33%
EFA NORTHWEST	90-1082	OPERATIONAL	\$5,528,000	\$342,709	6.20%
EFA NORTHWEST	86-0486	OPERATIONAL	\$18,000,000	\$1,101,459	6.12%
		TOTALS	\$74,509,399	\$8,499,498	11.41%
EFA NORTHWEST	86-0111	PERSONNEL HSNG.	\$4,820,000	\$348,657	7.23%
EFA NORTH	89-6685	PERSONNEL HSNG.	\$10,140,000	\$203,881	2.01%
EFA NORTH	87-0012	PERSONNEL HSNG.	\$9,579,425	\$289,375	3.02%
EFA MIDWEST	80-0956	PERSONNEL HSNG.	\$1,066,448	\$139,682	13.10%
LANT DIV	87-7220	PERSONNEL HSNG.	\$2,797,000	\$46,954	1.68%
EFA WEST	89-6776	PERSONNEL HSNG.	\$7,450,000	\$434,998	5.84%
EFA WEST	87-7773	PERSONNEL HSNG.	\$3,184,000	\$145,992	4.59%
SOUTH DIV	84-0517	PERSONNEL HSNG.	\$6,062,235	\$64,786	1.07%
SOUTH DIV	85-0716	PERSONNEL HSNG.	\$8,025,000	\$55,889	0.70%
SOUTH DIV	88-0035	PERSONNEL HSNG.	\$3,412,447	\$101,915	2.99%
EFA MIDWEST	90-0081	PERSONNEL HSNG.	\$9,448,259	\$364,807	3.86%
EFA MIDWEST	87-0080	PERSONNEL HSNG.	\$3,851,755	\$131,588	3.42%
EFA CHESAPEAKE	89-0015	PERSONNEL HSNG.	\$3,398,000	\$182,324	5.37%
SOUTHWEST DIV	87-8809	PERSONNEL HSNG.	\$3,908,871	\$440,252	11.26%
EFA NORTHWEST	93-2142	PERSONNEL HSNG.	\$2,185,000	\$54,639	2.50%
		TOTALS	\$79,328,440	\$3,005,739	3.79%
EFA CHESAPEAKE	86-0319	PRODUCTION	\$5,529,800	\$468,506	8.47%
		TOTALS	\$5,529,800	\$468,506	8.47%
EFA NORTH	89-0027	RDT & E	\$1,632,424	\$81,141	4.97%
EFA WEST	84-4831	RDT & E	\$1,066,295	\$370,090	34.71%
EFA WEST	87-7667	RDT & E	\$16,554,000	\$893,910	5.40%
EFA CHESAPEAKE	87-0149	RDT & E	\$2,263,355	\$323,347	14.29%
EFA CHESAPEAKE	86-0025	RDT & E	\$1,350,000	\$7,242	0.54%
EFA CHESAPEAKE	88-0202	RDT & E	\$1,964,625	\$126,939	6.46%
SOUTHWEST DIV	87-8825	RDT & E	\$3,022,200	\$118,626	3.93%
		TOTALS	\$27,852,899	\$1,921,295	6.90%
EFA NORTHWEST	93-4048	SITE IMPROV.	\$1,845,000	\$132,333	7.17%
		TOTALS	\$1,845,000	\$132,333	7.17%
EFA NORTH	83-0013	SUPPLY	\$13,451,000	\$412,728	3.07%
EFA WEST	86-0524	SUPPLY	\$1,767,837	\$178,565	10.10%
EFA WEST	89-6791	SUPPLY	\$8,956,000	\$394,671	4.41%
EFA WEST	90-1045	SUPPLY	\$1,772,073	\$93,882	5.30%
EFA MIDWEST	88-0022	SUPPLY	\$4,785,000	\$175,265	3.66%
SOUTHWEST DIV	89-6675	SUPPLY	\$7,456,000	\$224,516	3.01%

EFFD/EFA	PROJECT #	FACILITY TYPE (CAT. CODE)	AWARD AMOUNT (\$)	TOTAL MODS. (\$)	MODIFICATION RATE (%)
SOUTHWESTDIV	91-0114	SUPPLY	\$2,208,737	\$80,000	3.62%
EFA NORTHWEST	86-0144	SUPPLY	\$8,343,000	\$907,249	10.87%
EFA NORTHWEST	77-2294	SUPPLY	\$1,496,000	\$65,152	4.36%
		TOTALS	\$50,235,647	\$2,532,028	5.04%
EFA MIDWEST	86-0022	FAMILY HSNG	\$2,696,000	\$70,645	2.62%
EFA NORTH	86-0043	FAMILY HSNG.	\$3,088,000	\$27,185	0.88%
		TOTALS	\$5,784,000	\$97,830	1.69%
LANTDIV	87-7125	TRAINING	\$1,162,955	\$85,384	7.34%
LANTDIV	88-8195	TRAINING	\$2,100,000	\$78,134	3.72%
EFA NORTH	87-1076	TRAINING	\$1,587,800	\$65,236	4.11%
EFA WEST	84-4647	TRAINING	\$1,672,731	\$73,797	4.41%
EFA WEST	91-9526	TRAINING	\$1,674,489	\$166,495	9.94%
SOUTHDIV	86-0096	TRAINING	\$2,799,970	\$26,183	0.94%
SOUTHDIV	84-0234	TRAINING	\$1,919,800	\$54,173	2.82%
SOUTHDIV	83-0370	TRAINING	\$4,948,000	\$681	0.01%
EFA MIDWEST	84-0288	TRAINING	\$5,100,000	\$441,690	8.66%
EFA MIDWEST	83-0006	TRAINING	\$10,200,000	\$925,464	9.07%
EFA CHESAPEAKE	86-0155	TRAINING	\$2,600,000	\$82,399	3.17%
SOUTHWESTDIV	90-1003	TRAINING	\$1,931,919	\$807,985	41.82%
SOUTHWESTDIV	86-0228	TRAINING	\$5,163,724	\$246,745	4.78%
		TOTALS	\$42,861,388	\$3,054,366	7.13%
PACDIV	92-1319	UTILITIES IMPROV.	\$5,877,000	\$946,029	16.10%
PACDIV	86-1373	UTILITIES IMPROV.	\$1,323,110	\$155,976	11.79%
PACDIV	84-0025	UTILITIES IMPROV.	\$1,722,000	\$10,118	0.59%
EFA NORTHWEST	92-3502	UTILITIES IMPROV.	\$4,282,259	\$268,305	6.27%
LANTDIV	91-1017	UTILITIES IMPROV.	\$5,048,243	\$145,654	2.89%
EFA NORTH	85-0051	UTILITIES IMPROV.	\$2,835,733	\$299,642	10.57%
EFA NORTH	87-0033	UTILITIES IMPROV.	\$2,866,693	\$324,795	11.33%
EFA NORTH	84-0507	UTILITIES IMPROV.	\$1,128,703	\$45,347	4.02%
EFA WEST	91-9470	UTILITIES IMPROV.	\$2,290,000	\$147,019	6.42%
EFA CHESAPEAKE	89-0018	UTILITIES IMPROV.	\$2,171,000	\$626,768	28.87%
EFA CHESAPEAKE	83-0378	UTILITIES IMPROV.	\$1,192,695	\$70,856	5.94%
EFA NORTHWEST	88-4395	UTILITIES IMPROV.	\$1,578,000	\$6,614	0.42%
EFA NORTHWEST	93-9083	UTILITIES IMPROV.	\$1,045,000	\$3,787	0.36%
		TOTALS	\$33,360,436	\$3,050,910	9.15%

## Appendix E

### MILCON Projects Data





EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
LANTDIV	88-8174	VIRGINIA	61010	ADMINISTRATIVE	\$1,437,682	DSGN	CIVIL	\$10,722
						DSGN	DOORS/WINDOWS	\$3,892
						DSGN	ELECTRICAL	\$15,137
						DSGN	ELECTRICAL	\$1,383
						PLAN	EARTHWORK	(\$3,637)
						UNFO	CIVIL	\$1,201
						UNFO	CIVIL	\$7,941
						UNFO	EARTHWORK	\$21,000
						UNFO	EARTHWORK	\$43,214
						UNFO	HVAC	\$8,032
						UNFO	PLUMBING	\$6,551
						UNFO	ROOFING	\$7,128
						UNFO	TIME	\$0
						UNFO	UTILITIES	\$645
						UNFO	UTILITIES	\$92,003
							Total Mods. (\$)	\$304,755
							Mod. Rate (%)	6.59%
						ADMIN	ADMIN	\$0
						CREQ	CIVIL	\$25,000
						CREQ	CIVIL	\$9,000
LANTDIV	90-0102	VIRGINIA	21375	MAINTENANCE	\$6,190,000	CRIT	CIVIL	\$6,517
						CRIT	DOOR/WINDOW	\$3,250
						DSGN	CIVIL	\$415
						DSGN	DOOR/WINDOW	\$704
						DSGN	EARTHWORK	(\$3,490)
						DSGN	UTILITIES	(\$1,246)
						UNFO	EARTHWORK	\$52,178
						UNFO	EARTHWORK	\$4,218
							Total Mods. (\$)	\$96,546
							Mod. Rate (%)	6.72%
						ADMIN	ADMIN	\$591
						DSGN	CIVIL	\$50,000
						DSGN	CIVIL	\$11,991
						DSGN	CIVIL	\$4,763
						DSGN	ELECTRICAL	\$6,049
						DSGN	HVAC	\$2,566
						DSGN	HVAC	\$8,248
						DSGN	HVAC	(\$3,239)
						DSGN	PLUMBING	\$19,998
						DSGN	PLUMBING	\$4,000
						DSGN	UTILITIES	\$4,263
LANTDIV	87-7125	VIRGINIA	17135	TRAINING	\$1,162,955	DSGN	UTILITIES	\$25,007
						DSGN	UTILITIES	\$800
						DSGN	UTILITIES	(\$50)
						IDEA	CIVIL	(\$1,172)
						IDEA	EARTHWORK	\$8,039
						IDEA	FINISHES	\$1,905
						UNFO	DEMOLITION	\$10,000
						UNFO	ELECTRICAL	\$6,261
						UNFO	EQUIPMENT	\$6,266
						UNFO	N/A	(\$1,116)
						UNFO	UTILITIES	\$12,046
						UNFO	UTILITIES	\$1,021
						UNFO	UTILITIES	\$2,200
							Total Mods. (\$)	\$180,437
							Mod. Rate (%)	2.91%
						CREQ	EQUIPMENT	\$214
						CRIT	EARTHWORK	\$5,662
						CRIT	HVAC	\$0
						DSGN	ELECTRICAL	\$6,840
						DSGN	ELECTRICAL	\$30,590
						DSGN	ELECTRICAL	\$4,347
						DSGN	PLUMBING	\$12,051
						UNFO	CIVIL	\$9,641
						UNFO	CIVIL	\$2,611
LANTDIV	89-9160	KENTUCKY	21520	MAINTENANCE	\$4,711,711	UNFO	EARTHWORK	\$14,420
						UNFO	EARTHWORK	(\$992)
							Total Mods. (\$)	\$85,384
							Mod. Rate (%)	7.34%
						ADMIN	ADMIN	\$0
						CLAIM	CLAIM	\$8,683
						CLAIM	CLAIM	\$1,225
						CLAIM	PLUMBING	\$4,468
						CREQ	CIVIL	\$10,322
						CREQ	ELECTRICAL	\$800
						CREQ	HVAC	\$860

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
						CRIT	CIVIL	\$1,730
						DSGN	CIVIL	\$10,219
						DSGN	CIVIL	\$2,733
						DSGN	CIVIL	\$33,432
						DSGN	CIVIL	\$12,104
						DSGN	CIVIL	\$18,543
						DSGN	CIVIL	\$3,400
						DSGN	CIVIL	\$1
						DSGN	CLAIM	\$1
						DSGN	DOOR/WINDOW	\$795
						DSGN	ELECTRICAL	\$12,810
						DSGN	ELECTRICAL	\$2,280
						DSGN	FINISHES	\$10,712
						DSGN	HVAC	\$3,667
						DSGN	N/A	\$7,546
						DSGN	N/A	\$3,499
						DSGN	PLUMBING	\$2,961
						DSGN	PLUMBING	\$16,721
						DSGN	PLUMBING	\$1,979
						DSGN	ROOFING	(\$19,088)
						DSGN	UTILITIES	\$14,908
						IDEA	CIVIL	\$1
						IDEA	CIVIL	\$1
						IDEA	N/A	(\$12,488)
						UNFO	CIVIL	\$995
						UNFO	CIVIL	\$4,796
						UNFO	CIVIL	\$24,208
						UNFO	CIVIL	\$1
						UNFO	CIVIL	\$1
						UNFO	CLAIM	\$7,399
						UNFO	DEMOLITION	\$18,506
						UNFO	DEMOLITION	\$20,479
						UNFO	DEMOLITION	\$50,033
						UNFO	DEMOLITION	\$4,622
						UNFO	DOOR/WINDOW	\$14,064
						UNFO	EARTHWORK	\$37,419
						UNFO	EARTHWORK	\$3,235
						UNFO	EARTHWORK	\$12,986
						UNFO	ELECTRICAL	\$4,416
						UNFO	ELECTRICAL	\$6,205
						UNFO	FINISHES	\$1,681
						UNFO	FINISHES	\$7,954
						UNFO	HAZ. WASTE	\$9,904
						UNFO	HAZ. WASTE	\$12,869
						UNFO	HAZ. WASTE	\$10,078
						UNFO	HAZ. WASTE	\$29,426
						UNFO	HAZ. WASTE	\$9,775
						UNFO	HVAC	\$13,146
						UNFO	N/A	\$7,595
							Total Mods. (\$)	\$466,618
							Mod. Rate (%)	9.90%
LANTDIV	87-7220	AZORES	72210	UNACCOMPANIED PERSONNEL HOUSING	\$2,797,000	ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						CREQ	FINISHES	\$10,626
						CREQ	HVAC	\$19,502
						UNFO	EARTHWORK	\$3,682
						UNFO	HAZ. WASTE	\$13,144
							Total Mods. (\$)	\$46,954
							Mod. Rate (%)	1.68%
LANTDIV	85-5356	AZORES	12110	OPERATIONAL	\$5,143,906	ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	(\$16,982)
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						CREQ	ELECTRICAL	\$130,351
						CRIT	EARTHWORK	\$7,751
						DSGN	EARTHWORK	\$11,950
						DSGN	ELECTRICAL	\$95,821
						IDEA	CIVIL	(\$166,625)
						PLAN	EARTHWORK	\$274,630
						PLAN	EARTHWORK	\$48,274
						TIME	TIME	\$0
						UNFO	EARTHWORK	\$9,992
						UNFO	EARTHWORK	\$127,429
						UNFO	EQUIPMENT	\$18,539
						UNFO	EXT. OVHD	\$87,500
						UNFO	HAZ. WASTE	\$123,110
						UNFO	HAZ. WASTE	(\$51,120)

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
LANTDIV	81-1481	AZORES	14170	OPERATIONAL	\$3,302,500	UNFO	PLUMBING	\$853
						UNFO	UTILITIES	\$19,586
							Total Mods. (\$)	\$721,059
							Mod. Rate (%)	14.02%
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						CREQ	ELECTRICAL	\$11,608
						CREQ	PLUMBING	\$0
						CREQ	PLUMBING	\$6,513
						PLAN	ELECTRICAL	\$8,067
						UNFO	EARTHWORK	\$8,451
						UNFO	EARTHWORK	\$14,793
						UNFO	EARTHWORK	\$8,500
LANTDIV	88-8085	NO. CAROLINA	21710	MAINTENANCE	\$2,914,090	UNFO	UTILITIES	\$7,490
							Total Mods. (\$)	\$65,422
							Mod. Rate (%)	1.98%
						ADMIN	ADMIN	\$0
						CREQ	N/A	(\$4,036)
						CRIT	N/A	\$33,455
						CRIT	PLUMBING	\$40,000
						DSGN	CIVIL	\$4,439
						DSGN	CIVIL	\$3,771
						DSGN	ELECTRICAL	\$2,433
						DSGN	ELECTRICAL	\$12,803
						DSGN	N/A	(\$1,637)
						DSGN	PLUMBING	\$95,000
						DSGN	PLUMBING	\$7,204
LANTDIV	88-8195	NO. CAROLINA	17120	TRAINING	\$2,100,000	DSGN	ROOFING	\$9,653
						DSGN	UTILITIES	\$23,337
						DSGN	UTILITIES	\$11,231
						DSGN	UTILITIES	\$6,081
						DSGN	UTILITIES	\$1,490
						DSGN	UTILITIES	\$10,091
						DSGN	UTILITIES	\$23,377
						ERROR	HVAC	\$8,766
						UNFO	CIVIL	\$111,341
						UNFO	UTILITIES	\$9,900
							Total Mods. (\$)	\$408,699
							Mod. Rate (%)	14.02%
						ADMIN	ADMIN	\$0
						CLAIM	CLAIM	\$22,440
						CLAIM	CLAIM	\$5,000
LANTDIV	89-9075	NO. CAROLINA	61010	ADMINISTRATIVE	\$2,385,131	CREQ	CIVIL	\$4,000
						CREQ	CIVIL	\$4,950
						CREQ	FINISHES	\$3,569
						CREQ	FINISHES	\$1,305
						DSGN	ELECTRICAL	\$16,929
						DSGN	UTILITIES	\$830
						DSGN	UTILITIES	\$8,000
						DSGN	UTILITIES	\$11,111
							Total Mods. (\$)	\$78,134
							Mod. Rate (%)	3.72%
						CREQ	CIVIL	\$7,500
						CREQ	EQUIPMENT	\$17,062
						CREQ	FINISHES	\$16,740
						CRIT	CIVIL	\$8,174
WEST	84-4647	CALIFORNIA	17135	TRAINING	\$1,672,731	DSGN	HVAC	\$4,963
						UNFO	EARTHWORK	\$347
						UNFO	UTILITIES	\$4,222
							Total Mods. (\$)	\$59,008
							Mod. Rate (%)	2.47%
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	N/A	(\$11,584)
						CREQ	DOOR/WINDOW	(\$407)
						CREQ	DOOR/WINDOW	\$2,123
						CREQ	DOOR/WINDOW	\$984
						CREQ	HVAC	\$121
						CRIT	N/A	\$25,306
						DSGN	CIVIL	\$126
						DSGN	CIVIL	\$11,230
						DSGN	DOOR/WINDOW	\$220
						DSGN	ELECTRICAL	\$165
						DSGN	ELECTRICAL	\$2,934

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
WEST	91-9526	CALIFORNIA	17135	TRAINING	\$1,674,489	DSGN	ELECTRICAL	\$77
						DSGN	N/A	\$1,278
						DSGN	N/A	\$8,412
						DSGN	N/A	\$116
						DSGN	N/A	\$817
						DSGN	N/A	\$1,158
						DSGN	N/A	\$3,822
						DSGN	N/A	\$15,965
						DSGN	N/A	\$611
						DSGN	UTILITIES	\$1,989
						PLAN	ELECTRICAL	\$5,879
						UNFO	FINISHES	\$2,455
						Total Mods. (\$)		\$73,797
						Mod. Rate (%)		4.41%
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						CREQ	ELECTRICAL	\$0
						DSGN	CIVIL	\$3,200
						DSGN	CIVIL	\$2,138
						DSGN	CIVIL	\$1,426
						DSGN	CIVIL	\$6,646
						DSGN	CIVIL	\$441
						DSGN	CIVIL	\$2,672
						DSGN	CIVIL	\$873
						DSGN	CIVIL	\$496
						DSGN	CIVIL	\$3,103
						DSGN	CIVIL	\$0
						DSGN	CIVIL	\$776
						DSGN	CIVIL	\$266
						DSGN	DOOR/WINDOW	\$2,749
						DSGN	DOOR/WINDOW	\$1,325
						DSGN	ELECTRICAL	\$2,744
						DSGN	ELECTRICAL	\$1,064
						DSGN	FINISHES	\$3,081
						DSGN	FINISHES	\$4,853
						DSGN	HVAC	\$8,534
						DSGN	HVAC	\$3,518
						DSGN	HVAC	\$4,121
						DSGN	PLUMBING	\$6,264
						DSGN	ROOFING	\$7,359
						DSGN	ROOFING	\$8,315
						DSGN	ROOFING	\$3,981
						DSGN	ROOFING	\$479
						DSGN	ROOFING	\$3,179
						TIME	TIME	\$0
						UNFO	CIVIL	\$10,635
						UNFO	CIVIL	\$2,989
						UNFO	CIVIL	\$103
						UNFO	CIVIL	\$13,143
						UNFO	CIVIL	\$1,862
						UNFO	DEMOLITION	\$1,049
						UNFO	EARTHWORK	\$8,480
						UNFO	EARTHWORK	\$779
						UNFO	EARTHWORK	\$8,999
						UNFO	ELECTRICAL	\$8,842
						UNFO	ELECTRICAL	\$12,587
						UNFO	ELECTRICAL	\$480
						UNFO	ELECTRICAL	\$3,147
						UNFO	ELECTRICAL	\$3,017
						UNFO	ELECTRICAL	\$120
						UNFO	EXT. OVHD	\$3,918
						UNFO	PLUMBING	\$2,742
						Total Mods. (\$)		\$166,495
						Mod. Rate (%)		9.94%
WEST	91-9470	CALIFORNIA	81320	UTILITIES IMPROVEMENTS	\$2,290,000	ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	(\$8,349)
						CREQ	CIVIL	\$15,130
						CREQ	CIVIL	\$771
						CREQ	CIVIL	\$11,059
						CREQ	CIVIL	\$2,242
						CREQ	ELECTRICAL	\$9,915
						CREQ	ELECTRICAL	\$1,258
						CREQ	ELECTRICAL	\$1,873
						CREQ	ELECTRICAL	\$711
						CREQ	ELECTRICAL	\$711

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
						CREQ	ELECTRICAL	\$1,727
						CREQ	N/A	\$10,108
						CREQ	N/A	\$6,823
						DSGN	CIVIL	\$8,749
						DSGN	ELECTRICAL	\$470
						TIME	TIME	\$0
						TIME	TIME	\$0
						UNFO	DEMOLITION	\$4,165
						UNFO	EARTHWORK	\$26,762
						UNFO	EARTHWORK	\$28,309
						UNFO	EARTHWORK	\$6,634
						UNFO	EARTHWORK	\$2,478
						UNFO	ELECTRICAL	\$1,556
						UNFO	ELECTRICAL	\$3,003
						UNFO	HAZ. WASTE	\$9,595
						UNFO	UTILITIES	\$2,030
							Total Mods. (\$)	\$147,019
							Mod. Rate (%)	6.42%
WEST	90-1469	CALIFORNIA	51010	MEDICAL	\$1,870,426	ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						CREQ	ELECTRICAL	\$16,604
						CREQ	ELECTRICAL	\$11,009
						CREQ	ELECTRICAL	\$2,080
						CREQ	PLUMBING	\$2,997
						TIME	TIME	\$0
						UNFO	UTILITIES	\$4,030
							Total Mods. (\$)	\$36,720
							Mod. Rate (%)	1.96%
WEST	89-7107	CALIFORNIA	73015	COMMUNITY	\$3,574,000	ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						CLAIM	CLAIM	\$155,786
						CLAIM	CLAIM	\$74,294
						CREQ	CIVIL	(\$3,000)
						CREQ	N/A	\$9,326
						CRIT	ELECTRICAL	\$1,399
						DSGN	CIVIL	\$2,618
						DSGN	CIVIL	\$5,465
						DSGN	CIVIL	\$3,861
						DSGN	CIVIL	\$1,380
						DSGN	CIVIL	\$2,258
						DSGN	CIVIL	\$1,509
						DSGN	DOOR/WINDOW	\$8,266
						DSGN	DOOR/WINDOW	\$755
						DSGN	DOOR/WINDOW	\$2,964
						DSGN	EARTHWORK	\$1,697
						DSGN	EARTHWORK	\$1,463
						DSGN	ELECTRICAL	\$3,466
						DSGN	ELECTRICAL	\$4,840
						DSGN	ELECTRICAL	\$1,054
						DSGN	ELECTRICAL	\$1,377
						DSGN	ELECTRICAL	\$755
						DSGN	ELECTRICAL	\$5,004
						DSGN	EQUIPMENT	\$2,026
						DSGN	EQUIPMENT	\$977
						DSGN	HVAC	\$4,027
						DSGN	HVAC	\$2,124
						DSGN	N/A	\$3,832
						DSGN	N/A	\$8,803
						DSGN	N/A	\$493
						DSGN	N/A	\$21,295
						DSGN	N/A	\$1,788
						DSGN	N/A	\$2,417
						DSGN	PLUMBING	\$4,628
						DSGN	PLUMBING	\$4,690
						DSGN	PLUMBING	\$3,825
						DSGN	ROOFING	(\$716)
						PLAN	EARTHWORK	\$32,739
						TIME	TIME	\$0
						UNFO	ADMIN	\$0
						UNFO	CIVIL	\$2,500
						UNFO	CIVIL	\$12,796

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
WEST	89-6776	CALIFORNIA	72111	UNACCOMPANIED PERSONNEL HOUSING	\$7,450,000	UNFO	CIVIL	\$1,202
						UNFO	CIVIL	\$1,068
						UNFO	CIVIL	\$1,861
						UNFO	CIVIL	\$950
						UNFO	CIVIL	\$1,021
						UNFO	CIVIL	\$1,409
						UNFO	CIVIL	\$8,412
						UNFO	CLAIM	\$10,077
						UNFO	DOOR/WINDOW	\$44,669
						UNFO	DOOR/WINDOW	\$1,021
						UNFO	DOOR/WINDOWS	\$38,624
						UNFO	ELECTRICAL	\$439
						UNFO	FINISHES	\$1,732
						UNFO	N/A	\$6,032
						UNFO	N/A	\$442
						UNFO	N/A	\$43,892
						UNFO	N/A	\$8,931
						UNFO	N/A	\$482
						UNFO	N/A	\$2,216
						UNFO	N/A	\$1
						UNFO	PLUMBING	\$2,526
						UNFO	PLUMBING	\$466
						UNFO	PLUMBING	\$988
						UNFO	PLUMBING	\$2,500
						Total Mods. (\$)		\$575,742
						Mod. Rate (%)		16.11%
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						CREQ	ELECTRICAL	\$32,075
						CRIT	CIVIL	(\$11,000)
						DSGN	CIVIL	\$89,327
						DSGN	ELECTRICAL	\$68,580
						DSGN	ELECTRICAL	\$14,507
						PLAN	ADMIN	\$167,000
						UNFO	CIVIL	\$32,000
						UNFO	CIVIL	\$6,509
						UNFO	HAZ. WASTE	\$36,000
						Total Mods. (\$)		\$434,998
						Mod. Rate (%)		5.84%
WEST	89-6791	CALIFORNIA	41150	SUPPLY	\$8,956,000	ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						CLAIM	CLAIM	\$18,836
						CREQ	CIVIL	\$6,707
						CREQ	CIVIL	\$558
						CREQ	CIVIL	\$8,574
						CREQ	ELECTRICAL	\$23,214
						CREQ	ELECTRICAL	\$123,102
						CREQ	ELECTRICAL	\$11,300
						CREQ	ELECTRICAL	\$4,104
						CREQ	N/A	\$0
						CREQ	PLUMBING	\$20,893
						CREQ	PLUMBING	\$12,502
						CREQ	PLUMBING	\$7,700
						CREQ	PLUMBING	\$10,251
						CREQ	PLUMBING	\$9,103
						DSGN	CIVIL	(\$1,712)
						DSGN	CIVIL	\$2,000
						DSGN	DOOR/WINDOW	\$1,712
						DSGN	EARTHWORK	\$21,600
						DSGN	ELECTRICAL	\$10,301
						DSGN	ELECTRICAL	\$10,414
						DSGN	ELECTRICAL	\$9,581
						DSGN	N/A	\$6,480
						DSGN	N/A	\$154
						DSGN	PLUMBING	\$1,251
						DSGN	PLUMBING	\$1,000
						DSGN	PLUMBING	\$4,000
						DSGN	ROOFING	(\$4,945)
						PLAN	CIVIL	\$7,884
						TIME	TIME	\$0
						UNFO	EARTHWORK	\$2,661
						UNFO	EARTHWORK	\$4,590
						UNFO	EARTHWORK	\$3,825
						UNFO	EARTHWORK	\$14,500
						UNFO	ELECTRICAL	\$17,996
						UNFO	ELECTRICAL	\$14,728

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
WEST	87-7773	CALIFORNIA	72210	UNACCOMPANIED PERSONNEL HOUSING	\$3,184,000	UNFO	ELECTRICAL	\$786
						UNFO	ELECTRICAL	\$3,571
						UNFO	ELECTRICAL	\$452
						UNFO	N/A	\$0
						UNFO	PLUMBING	\$34,576
						UNFO	PLUMBING	\$2,624
						VALUE	CIVIL	(\$10,936)
						VALUE	ELECTRICAL	(\$1,768)
						VALUE	ELECTRICAL	(\$3,662)
						VALUE	N/A	(\$15,836)
						Total Mods. (\$)		\$394,671
						Mod. Rate (%)		4.41%
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						CREQ	CIVIL	\$4,380
						CREQ	CIVIL	\$2,395
						CREQ	CIVIL	\$1,608
						CREQ	ELECTRICAL	\$2,304
						CREQ	ELECTRICAL	\$3,062
						CREQ	FINISHES	\$520
						CREQ	PLUMBING	\$1,650
						DSGN	CIVIL	\$2,200
						DSGN	CIVIL	\$4,873
						DSGN	CIVIL	(\$376)
						DSGN	CIVIL	\$2,313
						DSGN	CIVIL	\$258
						DSGN	ELECTRICAL	\$1,272
						DSGN	FINISHES	\$4,505
						DSGN	FINISHES	\$1,338
						DSGN	FINISHES	\$1,800
						DSGN	HVAC	\$3,603
						DSGN	HVAC	\$3,955
WEST	84-4831	CALIFORNIA	31210	RDT & E	\$1,066,295	DSGN	N/A	\$4,306
						DSGN	PLUMBING	\$5,902
						IDEA	FINISHES	\$566
						IDEA	FINISHES	\$922
						IDEA	N/A	\$41,600
						IDEA	N/A	\$33,547
						IDEA	ROOFING	\$9,648
						UNFO	CIVIL	\$4,436
						UNFO	N/A	(\$3,599)
						UNFO	N/A	\$324
						UNFO	PLUMBING	\$4,350
						UNFO	PLUMBING	\$860
						UNFO	PLUMBING	\$1,470
						Total Mods. (\$)		\$145,992
						Mod. Rate (%)		4.59%
						ADMIN	ADMIN	\$0
						CLAIM	CLAIM	\$307,289
						CRIT	ELECTRICAL	\$16,895
						UNFO	ADMIN	\$2,598
						UNFO	ADMIN	\$1,700
						UNFO	EARTHWORK	\$9,229
						UNFO	EARTHWORK	\$8,252
						UNFO	ELECTRICAL	\$3,356
						UNFO	HAZ. WASTE	\$14,402
						UNFO	N/A	\$6,369
						Total Mods. (\$)		\$370,090
						Mod. Rate (%)		34.71%
WEST	90-1045	CALIFORNIA	42172	SUPPLY	\$1,772,073	DSGN	EARTHWORK	\$14,487
						DSGN	N/A	\$16,557
						UNFO	CIVIL	\$4,312
						UNFO	CIVIL	\$6,225
						UNFO	ELECTRICAL	\$15,164
						UNFO	ELECTRICAL	\$12,477
						UNFO	N/A	\$8,497
						UNFO	PLUMBING	\$16,163
						Total Mods. (\$)		\$93,882
						Mod. Rate (%)		5.30%
WEST	89-6685	CALIFORNIA	72111	UNACCOMPANIED PERSONNEL HOUSING	\$10,140,000	ADMIN	ADMIN	\$0
						DSGN	CIVIL	\$0
						DSGN	CIVIL	\$17,988
						DSGN	CIVIL	\$14,175
						DSGN	CIVIL	\$2,174
						DSGN	DOOR/WINDOW	\$49,497



EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
WEST	89-0782	CALIFORNIA	61010	ADMINISTRATIVE	\$1,128,651	DSGN	ELECTRICAL	\$1,528
						DSGN	EXT. OVHD	\$15,345
						DSGN	HVAC	\$1,500
						DSGN	HVAC	\$14,795
						DSGN	PLUMBING	\$7,796
						DSGN	PLUMBING	\$3,492
						DSGN	PLUMBING	\$14,795
						TIME	TIME	\$0
						UNFO	CIVIL	\$20,287
						UNFO	CIVIL	\$20,509
						UNFO	EARTHWORK	\$20,000
							Total Mods. (\$)	\$203,881
							Mod. Rate (%)	2.01%
						CREQ	CIVIL	\$35,191
						CREQ	CIVIL	\$3,627
						CREQ	ELECTRICAL	\$5,408
						CREQ	FINISHES	\$2,782
						DSGN	DOOR/WINDOW	\$4,126
						DSGN	EARTHWORK	\$2,395
WEST	86-0524	NEVADA	44110	SUPPLY	\$1,767,837	DSGN	ELECTRICAL	\$13,428
						DSGN	ELECTRICAL	\$1,075
						DSGN	EQUIPMENT	\$13,916
						DSGN	FINISHES	\$1,658
						UNFO	ELECTRICAL	\$47,135
							Total Mods. (\$)	\$130,741
							Mod. Rate (%)	11.58%
						ADMIN	ADMIN	\$0
						CRIT	CIVIL	\$55,000
						DSGN	ADMIN	\$0
WEST	87-7667	NEVADA	74024	COMMUNITY	\$2,893,000	DSGN	N/A	(\$2,067)
						PLAN	CIVIL	\$128,080
						VALUE	CIVIL	(\$2,448)
							Total Mods. (\$)	\$178,565
							Mod. Rate (%)	10.10%
WEST	87-7684	CALIFORNIA	31715	RDT & E	\$16,554,000	ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						CREQ	CIVIL	\$1,257
WEST	87-7684	CALIFORNIA	31715	RDT & E	\$16,554,000	CREQ	CIVIL	\$75,000
						CREQ	CIVIL	\$79,183
						CREQ	CIVIL	\$4,922
						CREQ	CIVIL	\$69,098
						CREQ	CIVIL	\$9,212
						CREQ	ELECTRICAL	\$3,238
						CREQ	ELECTRICAL	\$0
						CREQ	ELECTRICAL	\$30,000
						CREQ	FINISHES	\$29,094
						CREQ	FINISHES	\$12,500
						CREQ	N/A	\$29,146
						CREQ	N/A	(\$1,082)
						CREQ	N/A	\$2,544
						CREQ	ROOFING	\$18,680
						CREQ	ROOFING	\$32,220
						CREQ	ROOFING	\$16,320
						CREQ	ROOFING	\$13,780
						DSGN	CIVIL	\$10,400
						DSGN	CIVIL	\$3,472
						DSGN	CIVIL	\$3,558
						DSGN	CIVIL	\$13,173
						DSGN	CIVIL	\$7,269
						DSGN	CIVIL	\$2,272
						DSGN	CIVIL	\$2,582
						DSGN	CIVIL	\$11,305
						DSGN	CIVIL	\$65,162
						DSGN	CIVIL	\$65
						DSGN	CIVIL	\$600
						DSGN	CIVIL	\$0
						DSGN	CIVIL	\$79,311
						DSGN	ELECTRICAL	\$40,176

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
SOUTH DIV	84-0517	FLORIDA	72111	UNACCOMPANIED PERSONNEL HOUSING	\$6,062,235	DSGN	EQUIPMENT	\$9,502
						DSGN	HVAC	\$12,746
						DSGN	N/A	\$8,850
						DSGN	N/A	\$9,400
						DSGN	N/A	\$16,460
						DSGN	ROOFING	\$788
						UNFO	CIVIL	\$1,574
						UNFO	CIVIL	\$3,000
						UNFO	CIVIL	\$10,047
						UNFO	CIVIL	\$426
						UNFO	CIVIL	\$120,000
						UNFO	ELECTRICAL	\$10,500
						UNFO	N/A	\$20,906
						UNFO	N/A	\$5,254
						Total Mods. (\$)		\$893,910
						Mod. Rate (%)		5.40%
						CREQ	DOOR/WINDOW	\$0
						CREQ	FINISHES	\$4,910
						CREQ	FINISHES	\$10,731
						CREQ	FINISHES	\$1,194
SOUTH DIV	89-0173	SO. CAROLINA	73013	COMMUNITY	\$3,287,000	CREQ	UTILITIES	\$5,500
						DSGN	PLUMBING	\$1,030
						DSGN	PLUMBING	\$921
						DSGN	ROOFING	\$2,180
						UNFO	CIVIL	\$4,462
						UNFO	CIVIL	\$8,037
						UNFO	CIVIL	\$25,821
						UNFO	PLUMBING	\$0
						Total Mods. (\$)		\$64,786
						Mod. Rate (%)		1.07%
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	(\$5,300)
						ADMIN	ADMIN	\$27,299
						CLAIM	CLAIM	\$50,522
						CREQ	ELECTRICAL	\$6,897
						CREQ	HAZ. WASTE	\$1,800
						DSGN	CIVIL	\$6,124
						DSGN	CIVIL	\$4,388
						DSGN	CIVIL	\$5,746
						DSGN	CIVIL	\$663
						DSGN	CIVIL	\$666
						DSGN	CIVIL	\$13,730
						DSGN	CIVIL	\$1,991
						DSGN	CIVIL	\$800
						DSGN	CIVIL	\$1,454
						DSGN	CIVIL	\$5,385
						DSGN	DEMOLITION	\$3,363
						DSGN	DOOR/WINDOW	\$4,073
						DSGN	EARTHWORK	\$120
						DSGN	ELECTRICAL	\$1,029
						DSGN	ELECTRICAL	\$1,197
						DSGN	ELECTRICAL	\$1,428
						DSGN	ELECTRICAL	\$1,140
						DSGN	ELECTRICAL	\$3,089
						DSGN	ELECTRICAL	\$1,028
						DSGN	EQUIPMENT	\$1,880
						DSGN	FINISHES	\$1,039
						DSGN	FINISHES	\$372
						DSGN	FINISHES	\$127
						DSGN	HVAC	\$698
						DSGN	HVAC	\$13,946
						DSGN	PLUMBING	\$3,182
						DSGN	PLUMBING	\$3,876
						DSGN	UTILITIES	\$1,207
						ERROR	CIVIL	\$8,238
						ERROR	ELECTRICAL	\$1,733
						ERROR	ELECTRICAL	\$10,377
						ERROR	ELECTRICAL	\$3,136
						ERROR	ELECTRICAL	\$1,360
						ERROR	EQUIPMENT	\$1,194
						ERROR	FINISHES	\$14,582
						ERROR	PLUMBING	\$2,556
						UNFO	ADMIN	\$0

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
SOUTH DIV	86-0016	SO. CAROLINA	54010	MEDICAL	\$2,909,800	UNFO	CIVIL	\$9,200
						UNFO	CIVIL	\$5,244
						UNFO	CIVIL	(\$2,195)
						UNFO	CIVIL	\$1,659
						UNFO	EARTHWORK	(\$500)
						UNFO	HAZ. WASTE	(\$364)
						UNFO	UTILITIES	\$1,367
						VALUE	CIVIL	(\$6,580)
							Total Mods. (\$)	\$215,966
							Mod. Rate (%)	6.57%
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	CIVIL	\$483
						CREQ	CIVIL	\$1,823
						CREQ	CIVIL	\$10,000
						CREQ	CIVIL	\$561
						CREQ	CIVIL	\$0
						CREQ	DOOR/WINDOW	\$1,818
						CREQ	FINISHES	\$1,156
						CREQ	N/A	(\$1,207)
						CREQ	UTILITIES	\$5,412
						DSGN	CIVIL	\$15,809
						DSGN	CIVIL	\$4,718
						DSGN	CIVIL	\$1,095
						DSGN	CIVIL	\$699
						DSGN	CIVIL	(\$3,412)
						DSGN	DOOR/WINDOW	\$3,541
						DSGN	ELECTRICAL	\$5,000
						DSGN	ELECTRICAL	\$20,000
						DSGN	ELECTRICAL	\$1,310
						DSGN	EQUIPMENT	\$0
						DSGN	EQUIPMENT	\$28,480
						DSGN	N/A	(\$7,709)
						DSGN	PLUMBING	\$80,701
						DSGN	ROOFING	\$5,839
						DSGN	UTILITIES	\$2,000
						TIME	TIME	\$0
						UNFO	CIVIL	\$4,000
						UNFO	CIVIL	\$1,625
						UNFO	DEMOLITION	\$2,000
						UNFO	DOOR/WINDOW	\$854
						UNFO	DOOR/WINDOW	\$7,572
						UNFO	ELECTRICAL	\$1,247
						UNFO	ELECTRICAL	\$15,023
						UNFO	PLUMBING	\$7,871
							Total Mods. (\$)	\$218,309
							Mod. Rate (%)	7.50%
SOUTH DIV	86-0725	MISSISSIPPI	21330	MAINTENANCE	\$3,193,237	ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	CIVIL	(\$14,142)
						CREQ	CIVIL	\$0
						CREQ	CIVIL	\$15,000
						CREQ	CIVIL	\$11,752
						CREQ	FINISHES	\$2,500
						DSGN	DOOR/WINDOW	\$3,200
						DSGN	ELECTRICAL	\$11,927
						DSGN	ELECTRICAL	\$10,511
						DSGN	ELECTRICAL	\$10,163
						DSGN	ELECTRICAL	\$3,650
						DSGN	ELECTRICAL	\$13,075
						DSGN	FINISHES	\$4,767
						DSGN	HVAC	\$1,661
						DSGN	HVAC	\$6,300
						DSGN	UTILITIES	\$5,493
						DSGN	UTILITIES	\$12,000
						DSGN	UTILITIES	\$998
						TIME	TIME	\$0
						TIME	TIME	\$0
						UNFO	CIVIL	\$1,181
						UNFO	DEMOLITION	\$1,800
						UNFO	EARTHWORK	\$60,000
						UNFO	EARTHWORK	\$17,391

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
SOUTH DIV	88-0035	MISSISSIPPI	72111	UNACCOMPANIED PERSONNEL HOUSING	\$3,412,447		Total Mods. (\$)	\$179,227
							Mod. Rate (%)	5.61%
							ADMIN	\$0
							ADMIN	\$0
							ADMIN	\$0
							CREQ	\$10,000
							CREQ	(\$170)
							DSGN	\$4,777
							DSGN	\$3,018
							DSGN	\$24,107
							DSGN	\$6,000
							DSGN	\$12,921
							TIME	\$0
							TIME	\$0
							UNFO	\$31,262
							UNFO	\$10,000
							Total Mods. (\$)	\$101,915
							Mod. Rate (%)	2.99%
SOUTH DIV	89-0956	MISSISSIPPI	72210	UNACCOMPANIED PERSONNEL HOUSING	\$1,066,448		CREQ	\$517
							CREQ	(\$3,053)
							CREQ	\$4,055
							CREQ	\$35,662
							DSGN	\$27,000
							DSGN	\$652
							DSGN	\$11,342
							DSGN	\$419
							UNFO	\$50,000
							UNFO	\$13,088
							Total Mods. (\$)	\$139,682
							Mod. Rate (%)	13.10%
SOUTH DIV	86-0727	MISSISSIPPI	61010	ADMINISTRATIVE	\$1,705,500		ADMIN	\$0
							ADMIN	\$0
							ADMIN	\$0
							ADMIN	\$0
							ADMIN	\$0
							ADMIN	\$0
							CREQ	\$9,750
							CREQ	(\$69)
							CREQ	\$22,000
							CREQ	\$3,429
							DSGN	\$10,000
							DSGN	(\$3,950)
							DSGN	(\$181)
							DSGN	\$17,812
							DSGN	\$4,494
							DSGN	(\$10)
							DSGN	\$2,500
							DSGN	\$2,200
							DSGN	\$0
							DSGN	\$3,275
							DSGN	\$35,044
							TIME	\$0
							TIME	\$0
							TIME	\$0
							UNFO	\$50,000
							UNFO	\$35,000
							UNFO	\$5,852
							UNFO	(\$248)
							UNFO	(\$67)
							Total Mods. (\$)	\$189,973
							Mod. Rate (%)	11.14%
SOUTH DIV	86-0112	TEXAS	21105	MAINTENANCE	\$7,149,000		ADMIN	\$0
							CREQ	\$32,752
							CREQ	\$48,541
							TIME	\$0
							UNFO	\$6,534
							UNFO	\$1,469
							UNFO	\$26,500
							UNFO	\$11,481
							UNFO	\$3,269
							UNFO	\$7,248
							UNFO	\$11,700
							UNFO	\$10,897
							UNFO	\$7,672
							UNFO	\$8,005
							UNFO	\$4,200
							UNFO	\$58,762
							EXT. OVHD	

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
SOUTH DIV	81-0673	FLORIDA	14817	OPERATIONAL	\$4,799,000	UNFO	HAZ. WASTE	\$10,733
						UNFO	HAZ. WASTE	\$1,657
						UNFO	HVAC	\$12,987
						UNFO	HVAC	\$3,150
						UNFO	UTILITIES	\$5,607
							Total Mods. (\$)	\$273,164
							Mod. Rate (%)	3.82%
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$147,844
						ADMIN	ADMIN	\$0
						CREQ	ELECTRICAL	\$237,146
						CREQ	EQUIPMENT	\$5,146
						CRIT	CIVIL	\$24,221
						DSGN	CIVIL	\$25,805
						DSGN	CIVIL	\$1,976
						DSGN	ELECTRICAL	\$10,544
						DSGN	ELECTRICAL	\$10,260
						DSGN	EQUIPMENT	\$13,100
						DSGN	EQUIPMENT	\$4,960
						DSGN	EXT. OVHD	\$80,900
						DSGN	PLUMBING	\$5,948
SOUTH DIV	83-0370	TENNESSEE	17135	TRAINING	\$4,948,000	UNFO	ADMIN	(\$6,000)
						UNFO	ELECTRICAL	\$6,451
						UNFO	HVAC	\$22,511
						VALUE	ELECTRICAL	(\$12,833)
							Total Mods. (\$)	\$577,979
							Mod. Rate (%)	12.04%
						ADMIN	ADMIN	\$0
						CREQ	ELECTRICAL	\$251
						CRIT	CIVIL	(\$9,356)
						DSGN	DOOR/WINDOW	\$5,896
						DSGN	ELECTRICAL	(\$4,000)
						DSGN	ELECTRICAL	\$1,751
						DSGN	FINISHES	\$9,443
						DSGN	ROOFING	\$789
						PLAN	DOOR/WINDOW	\$2,990
						SCOPE	CIVIL	(\$933)
						SCOPE	CIVIL	(\$6,150)
						TIME	TIME	\$0
							Total Mods. (\$)	\$681
							Mod. Rate (%)	0.01%
SOUTH DIV	84-0234	TENNESSEE	17120	TRAINING	\$1,919,800	ADMIN	ADMIN	\$0
						CREQ	CIVIL	\$6,577
						CREQ	CIVIL	\$4,073
						CREQ	EQUIPMENT	\$1,213
						DSGN	DEMOLITION	\$3,000
						DSGN	ELECTRICAL	\$5,219
						DSGN	EQUIPMENT	\$3,400
						TIME	TIME	\$0
						UNFO	CIVIL	\$8,268
						UNFO	EQUIPMENT	\$22,423
							Total Mods. (\$)	\$54,173
							Mod. Rate (%)	2.82%
SOUTH DIV	83-0232	TENNESSEE	73015	COMMUNITY	\$2,957,500	ADMIN	ADMIN	\$0
						CREQ	DOOR/WINDOW	\$1,807
						DSGN	CIVIL	\$4,036
						DSGN	CIVIL	\$1,500
						DSGN	CIVIL	\$549
						DSGN	CIVIL	\$6,234
						DSGN	ELECTRICAL	\$3,246
						DSGN	EXT. OVHD	\$31,800
						DSGN	FINISHES	\$5,000
						DSGN	PLUMBING	\$3,500
						TIME	TIME	\$0
						UNFO	CIVIL	\$11,952
							Total Mods. (\$)	\$69,624
							Mod. Rate (%)	2.35%
SOUTH DIV	85-0716	TENNESSEE	72114	UNACCOMPANIED PERSONNEL HOUSING	\$8,025,000	ADMIN	ADMIN	\$0
						CRIT	ELECTRICAL	(\$11,892)
						DSGN	CIVIL	\$10,118
						DSGN	CIVIL	\$3,307
						DSGN	CIVIL	(\$5,155)
						DSGN	DOOR/WINDOW	\$3,456
						DSGN	ROOFING	\$12,209
						ERROR	CIVIL	\$55,616

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
SOUTHDI	87-0013	GEORGIA	21410	MAINTENANCE	\$1,538,000	UNFO	ADMIN	(\$300)
						UNFO	CIVIL	(\$23,172)
						UNFO	EARTHWORK	\$10,223
						UNFO	HAZ. WASTE	\$6,581
						UNFO	UTILITIES	\$2,818
						UNFO	ROOFING	(\$7,920)
						UNFO	VALUE	\$55,889
						UNFO	Total Mods. (\$)	0.70%
						UNFO	Mod. Rate (%)	
						UNFO	ADMIN	\$0
						UNFO	CREQ	\$5,764
						UNFO	CREQ	\$1,000
						UNFO	PLUMBING	\$1,966
						UNFO	CIVIL	\$2,198
						UNFO	CIVIL	(\$3,506)
						UNFO	EQUIPMENT	\$1,050
						UNFO	HVAC	\$967
						UNFO	PLUMBING	\$9,600
						UNFO	PLUMBING	\$3,518
						UNFO	UTILITIES	\$3,737
						UNFO	UTILITIES	\$10,000
						UNFO	CIVIL	\$1,350
						UNFO	PLUMBING	\$37,644
						UNFO	Total Mods. (\$)	2.45%
						UNFO	Mod. Rate (%)	
						UNFO	ADMIN	\$0
						UNFO	ADMIN	\$0
						UNFO	ADMIN	\$0
						UNFO	CLAIM	\$3,037
						UNFO	CLAIM	\$2,326
						UNFO	CLAIM	\$3,305
						UNFO	CIVIL	\$905
						UNFO	CIVIL	(\$4,026)
						UNFO	HVAC	(\$100)
						UNFO	CIVIL	(\$560)
						UNFO	CIVIL	\$158
						UNFO	CIVIL	(\$155)
						UNFO	CIVIL	\$1,090
						UNFO	EARTHWORK	\$15,192
						UNFO	UTILITIES	\$1,793
						UNFO	UTILITIES	\$2,977
						UNFO	UTILITIES	\$241
						UNFO	UTILITIES	\$26,183
						UNFO	Total Mods. (\$)	0.94%
						UNFO	Mod. Rate (%)	
						UNFO	ADMIN	\$0
						UNFO	ADMIN	\$36,392
						UNFO	ELECTRICAL	\$5,434
						UNFO	FINISHES	\$15,552
						UNFO	CIVIL	\$7,589
						UNFO	CIVIL	\$2,073
						UNFO	DOOR/WINDOW	\$6,033
						UNFO	DOOR/WINDOW	\$2,848
						UNFO	ELECTRICAL	\$19,009
						UNFO	ELECTRICAL	\$6,562
						UNFO	ELECTRICAL	\$15,987
						UNFO	ELECTRICAL	\$3,491
						UNFO	EXT. OVHD	\$6,846
						UNFO	EXT. OVHD	\$12,662
						UNFO	HVAC	\$3,472
						UNFO	PLUMBING	\$29,457
						UNFO	PLUMBING	\$8,917
						UNFO	UTILITIES	\$182,324
						UNFO	Total Mods. (\$)	5.37%
						UNFO	Mod. Rate (%)	
						UNFO	DEMOLITION	\$3,159
						UNFO	DOOR/WINDOW	\$9,694
						UNFO	ELECTRICAL	\$3,743
						UNFO	HAZ. WASTE	\$8,528
						UNFO	UTILITIES	\$8,632
						UNFO	TIME	\$0
						UNFO	CIVIL	\$1,417
						UNFO	CIVIL	\$15,179
						UNFO	CIVIL	\$467
						UNFO	DEMOLITION	\$11,162
						UNFO	DOOR/WINDOW	\$1,835
						UNFO	ELECTRICAL	\$1,494
						UNFO	ELECTRICAL	\$11,792
						UNFO	FINISHES	(\$15,675)
						UNFO	N/A	\$61,427
						UNFO	Total Mods. (\$)	
						UNFO	Mod. Rate (%)	

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
CHESAPEAKE	86-0031	WASHINGTON	61010	ADMINISTRATIVE	\$2,100,421		Mod. Rate (%)	3.54%
						ADMIN	ADMIN	\$42,429
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						CREQ	CIVIL	\$49,949
						CREQ	CIVIL	\$5,170
						CREQ	DOOR/WINDOW	\$7,956
						CREQ	DOOR/WINDOW	\$1,443
						CREQ	ELECTRICAL	\$4,775
						CREQ	HVAC	\$430
						CREQ	PLUMBING	\$12,308
						DSGN	CIVIL	\$9,300
						DSGN	CIVIL	\$880
						DSGN	CIVIL	\$2,850
						DSGN	CIVIL	\$2,425
						DSGN	ELECTRICAL	\$2,000
						DSGN	ELECTRICAL	\$504
						DSGN	HVAC	\$7,503
						DSGN	HVAC	\$2,253
						DSGN	PLUMBING	\$6,073
						DSGN	PLUMBING	\$824
						DSGN	UTILITIES	\$5,231
						PLAN	EARTHWORK	\$46,144
						UNFO	CIVIL	(\$2,333)
						UNFO	CIVIL	\$21,500
						UNFO	CIVIL	\$438
						UNFO	DEMOLITION	\$1,415
						UNFO	DOOR/WINDOW	\$3,886
						UNFO	DOOR/WINDOW	\$4,684
						UNFO	EARTHWORK	\$7,645
						UNFO	EARTHWORK	\$1,400
						UNFO	EARTHWORK	\$800
						UNFO	ELECTRICAL	(\$14,500)
						UNFO	ELECTRICAL	\$1,882
						UNFO	ELECTRICAL	\$3,204
						UNFO	EQUIPMENT	\$2,962
						UNFO	EQUIPMENT	\$22,498
						UNFO	FINISHES	\$33,047
						UNFO	FINISHES	\$10,700
						UNFO	FINISHES	\$1,756
						UNFO	FINISHES	\$2,947
						UNFO	FINISHES	\$1,000
						UNFO	HAZ. WASTE	\$13,051
						UNFO	PLUMBING	\$10,195
						UNFO	PLUMBING	\$2,997
						UNFO	PLUMBING	\$4,774
						UNFO	PLUMBING	\$1,967
						UNFO	PLUMBING	\$3,334
						UNFO	UTILITIES	\$35,268
						UNFO	UTILITIES	\$607
						UNFO	UTILITIES	\$13,367
						UNFO	UTILITIES	\$4,374
						UNFO	UTILITIES	\$5,936
						Total Mods. (\$)		\$411,248
						Mod. Rate (%)		19.58%
CHESAPEAKE	86-0276	WASHINGTON	61010	ADMINISTRATIVE	\$4,090,000	ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						DSGN	DEMOLITION	\$19,712
						DSGN	ROOFING	\$12,444
						TIME	TIME	\$0
						UNFO	CIVIL	\$23,654
						UNFO	CIVIL	\$4,723
						UNFO	CIVIL	\$7,250
						UNFO	DOOR/WINDOW	\$2,643
						UNFO	ELECTRICAL	\$5,857
						UNFO	FINISHES	\$8,989
						Total Mods. (\$)		\$85,272
						Mod. Rate (%)		2.08%
CHESAPEAKE	86-0023	WASHINGTON	21420	MAINTENANCE	\$5,757,510	ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						CLAIM	CLAIM	\$94,627
						CREQ	CIVIL	\$35,602
						CREQ	EARTHWORK	(\$80,000)
						CREQ	ELECTRICAL	\$7,121
						CREQ	EQUIPMENT	\$329,925
						CREQ	FINISHES	\$1,275
						CREQ	N/A	\$0

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
CHESAPEAKE	87-0149	WASHINGTON	31011	RDT & E	\$2,263,355	CREQ	N/A	(\$45,951)
						DSGN	CIVIL	\$4,545
						DSGN	CIVIL	\$14,990
						DSGN	CIVIL	\$4,792
						DSGN	CIVIL	\$2,500
						DSGN	CIVIL	\$1,121
						DSGN	CIVIL	\$10,914
						DSGN	EARTHWORK	\$8,705
						DSGN	ELECTRICAL	\$50,261
						DSGN	ELECTRICAL	\$1,088
						DSGN	EXT. OVHD	\$5,849
						DSGN	FINISHES	\$8,288
						DSGN	HVAC	\$28,500
						DSGN	HVAC	\$5,000
						DSGN	HVAC	\$9,557
						DSGN	N/A	\$1,142
						DSGN	PLUMBING	\$1,000
						DSGN	PLUMBING	\$11,624
						DSGN	PLUMBING	\$1,632
						DSGN	ROOFING	\$4,000
						DSGN	ROOFING	\$17,461
						DSGN	ROOFING	\$3,349
						ERROR	CIVIL	\$12,043
						ERROR	CIVIL	\$979
						ERROR	CIVIL	\$11,189
						ERROR	CIVIL	\$2,720
						SCOPE	N/A	(\$2,518)
						UNFO	CIVIL	\$86,340
						UNFO	CIVIL	\$7,220
						UNFO	CIVIL	\$9,060
						UNFO	EARTHWORK	\$6,495
						UNFO	N/A	\$572
						UNFO	PLUMBING	\$26,257
						UNFO	UTILITIES	\$13,266
						Total Mods. (\$)		\$712,540
						Mod. Rate (%)		12.38%
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						CREQ	DOOR/WINDOW	\$425
						CREQ	ELECTRICAL	\$11,000
						CREQ	ELECTRICAL	\$79,429
						CREQ	HVAC	\$5,970
						CREQ	N/A	(\$15,000)
						CREQ	N/A	\$5,970
						CREQ	PLUMBING	\$7,782
						CREQ	PLUMBING	\$772
						CRIT	ELECTRICAL	\$4,117
						DSGN	CIVIL	\$3,500
						DSGN	CIVIL	\$7,041
						DSGN	CIVIL	\$8,756
						DSGN	ELECTRICAL	\$18,596
						DSGN	ELECTRICAL	\$2,168
						DSGN	ELECTRICAL	\$5,004
						DSGN	EXT. OVHD	\$3,432
						DSGN	FINISHES	\$0
						DSGN	FINISHES	\$12,036
						DSGN	FINISHES	\$1,030
						DSGN	FINISHES	\$2,500
						DSGN	HVAC	\$1,506
						DSGN	HVAC	\$3,441
						DSGN	N/A	\$9,939
						DSGN	N/A	\$20,231
						DSGN	N/A	\$3,547
						DSGN	PLUMBING	\$1,240
						DSGN	PLUMBING	\$5,260
						DSGN	PLUMBING	\$5,000
						DSGN	PLUMBING	\$551
						DSGN	ROOFING	\$6,278
						UNFO	CIVIL	\$2,048
						UNFO	DEMOLITION	\$4,399
						UNFO	ELECTRICAL	\$46,755
						UNFO	ELECTRICAL	\$3,400
						UNFO	ELECTRICAL	\$9,395
						UNFO	ELECTRICAL	\$0
						UNFO	ELECTRICAL	\$514
						UNFO	ELECTRICAL	\$796
						UNFO	ELECTRICAL	\$2,128
						UNFO	FINISHES	\$3,214
						UNFO	HAZ. WASTE	\$9,316



EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
CHESAPEAKE	86-0067	WASHINGTON	13115	OPERATIONAL	\$2,810,000	UNFO	HAZ. WASTE	\$1,518
						UNFO	N/A	\$676
						UNFO	UTILITIES	\$3,629
						UNFO	UTILITIES	\$11,809
						UNFO	UTILITIES	\$2,229
						Total Mods. (\$)		\$323,347
						Mod. Rate (%)		14.29%
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						CREQ	ELECTRICAL	\$5,222
						DSGN	DOOR/WINDOW	\$3,030
						DSGN	ELECTRICAL	\$7,527
						DSGN	ELECTRICAL	\$9,618
						DSGN	ELECTRICAL	\$4,405
						DSGN	ELECTRICAL	\$2,756
						DSGN	EQUIPMENT	\$2,907
						DSGN	FINISHES	\$5,397
						DSGN	HAZ. WASTE	\$3,215
						DSGN	HVAC	\$9,449
						DSGN	HVAC	\$9,304
						UNFO	CIVIL	\$8,700
						UNFO	CIVIL	\$1,980
						UNFO	CIVIL	\$19,000
						UNFO	ELECTRICAL	\$5,600
						UNFO	EQUIPMENT	\$300,175
						UNFO	EXT. OVHD	\$45,303
						UNFO	HAZ. WASTE	\$10,000
						UNFO	HAZ. WASTE	\$209,530
						UNFO	HAZ. WASTE	\$60,000
						UNFO	HAZ. WASTE	\$45,000
						UNFO	HAZ. WASTE	\$5,898
						UNFO	HAZ. WASTE	\$72,000
						UNFO	UTILITIES	\$13,310
						Total Mods. (\$)		\$859,326
						Mod. Rate (%)		30.58%
CHESAPEAKE	86-0025	WASHINGTON	31720	RDT & E	\$1,350,000	ADMIN	ADMIN	\$0
						ADMIN	ADMIN	(\$4,050)
						DSGN	CIVIL	\$1,190
						DSGN	DOOR/WINDOW	\$708
						DSGN	N/A	(\$780)
						DSGN	N/A	(\$1,339)
						DSGN	UTILITIES	\$2,679
						UNFO	CIVIL	\$477
						UNFO	ROOFING	\$298
						UNFO	UTILITIES	\$8,059
						Total Mods. (\$)		\$7,242
						Mod. Rate (%)		0.54%
CHESAPEAKE	88-0202	WASHINGTON	31710	RDT & E	\$1,964,625	ADMIN	ADMIN	\$0
						CREQ	CIVIL	\$1,367
						CREQ	CIVIL	\$517
						CREQ	DOOR/WINDOW	\$7,840
						DSGN	CIVIL	\$1,335
						DSGN	CIVIL	\$8,450
						DSGN	ELECTRICAL	\$7,884
						DSGN	ELECTRICAL	\$3,418
						DSGN	ELECTRICAL	\$2,764
						DSGN	ELECTRICAL	\$1,468
						DSGN	FINISHES	\$4,444
						DSGN	HVAC	\$6,056
						DSGN	HVAC	\$1,400
						DSGN	N/A	\$0
						DSGN	N/A	\$3,628
						DSGN	N/A	\$3,749
						DSGN	UTILITIES	(\$13,000)
						ERROR	ELECTRICAL	\$19,416
						UNFO	EARTHWORK	\$35,000
						UNFO	ELECTRICAL	\$4,096
						UNFO	ELECTRICAL	\$26,439
						UNFO	UTILITIES	\$668
						Total Mods. (\$)		\$126,939
						Mod. Rate (%)		6.46%
CHESAPEAKE	85-0119	MARYLAND	21111	MAINTENANCE	\$3,956,000	ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						DSGN	CIVIL	\$8,240
						DSGN	CIVIL	\$2,050

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
CHESAPEAKE	85-0127	MARYLAND	21145	MAINTENANCE	\$1,938,000	DSGN	CIVIL	\$1,205
						DSGN	CIVIL	\$239,393
						DSGN	DOOR/WINDOW	\$325
						DSGN	ELECTRICAL	\$3,487
						DSGN	ELECTRICAL	\$3,509
						DSGN	ELECTRICAL	\$2,371
						DSGN	ELECTRICAL	\$5,441
						DSGN	FINISHES	\$1,152
						DSGN	HVAC	\$30,900
						DSGN	PLUMBING	\$11,985
						UNFO	CIVIL	(\$7,500)
						UNFO	CIVIL	(\$30,000)
						UNFO	CIVIL	\$2,413
						UNFO	CIVIL	\$3,183
						UNFO	DEMOLITION	\$5,300
						UNFO	DEMOLITION	\$2,700
						UNFO	EARTHWORK	\$8,500
						UNFO	ELECTRICAL	\$613
						UNFO	ELECTRICAL	(\$5,746)
						UNFO	ELECTRICAL	(\$4,659)
						UNFO	ELECTRICAL	\$1,341
						UNFO	EQUIPMENT	\$638
						UNFO	PLUMBING	\$2,000
						UNFO	UTILITIES	\$3,500
						Total Mods. (\$)		\$292,341
						Mod. Rate (%)		7.39%
						CREQ	HVAC	\$900
						DSGN	N/A	\$0
						DSGN	N/A	\$0
						DSGN	PLUMBING	\$1,120
						DSGN	ROOFING	\$560
						DSGN	UTILITIES	\$1,190
						ERROR	CIVIL	\$3,440
						ERROR	CIVIL	\$2,357
						UNFO	DEMOLITION	\$0
						UNFO	DEMOLITION	\$3,194
						UNFO	EARTHWORK	\$1,295
						UNFO	EARTHWORK	\$24,000
						UNFO	ELECTRICAL	\$1,591
						UNFO	N/A	(\$15,000)
						UNFO	PLUMBING	\$15,105
						UNFO	UTILITIES	\$338
						Total Mods. (\$)		\$40,090
						Mod. Rate (%)		2.07%
CHESAPEAKE	83-0378	MARYLAND	88011	UTILITIES IMPROVEMENTS	\$1,192,695	ADMIN	ADMIN	\$0
						ADMIN	ADMIN	(\$1,204)
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						DSGN	ELECTRICAL	\$2,854
						DSGN	ELECTRICAL	\$2,667
						DSGN	HVAC	\$2,586
						DSGN	UTILITIES	\$29,822
						ERROR	DEMOLITION	\$1,608
						ERROR	ELECTRICAL	\$8,196
						TIME	TIME	\$0
						UNFO	CIVIL	\$984
						UNFO	CIVIL	\$32,738
						UNFO	ELECTRICAL	\$2,651
						UNFO	EQUIPMENT	\$892
						UNFO	HAZ. WASTE	\$1,304
						UNFO	N/A	(\$15,437)
						UNFO	N/A	(\$1,705)
						UNFO	UTILITIES	\$400
						UNFO	UTILITIES	\$2,500
						Total Mods. (\$)		\$70,856
						Mod. Rate (%)		5.94%
CHESAPEAKE	86-0319	MARYLAND	22681	PRODUCTION	\$5,529,800	ADMIN	ADMIN	\$0
						CREQ	ELECTRICAL	\$1,500
						CREQ	ELECTRICAL	\$14,000
						CREQ	ELECTRICAL	\$43,100
						CREQ	ELECTRICAL	\$0
						CREQ	HVAC	\$5,623
						CREQ	N/A	\$147,000
						CREQ	N/A	\$9,690
						DSGN	CIVIL	\$15,967
						DSGN	CIVIL	\$17,025
						DSGN	ELECTRICAL	\$18,837

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
CHESAPEAKE	89-0018	MARYLAND	83320	UTILITIES IMPROVEMENTS	\$2,171,000	DSGN	ELECTRICAL	\$17,890
						DSGN	N/A	\$2,153
						DSGN	N/A	\$16,740
						DSGN	PLUMBING	\$31,903
						UNFO	EARTHWORK	\$66,674
						UNFO	ELECTRICAL	\$58,875
						UNFO	N/A	\$1,529
						Total Mods. (\$)		\$468,506
						Mod. Rate (%)		8.47%
						ADMIN	ADMIN	\$0
						DSGN	CIVIL	\$16,490
						DSGN	CIVIL	\$46,911
						DSGN	CIVIL	\$20,000
						DSGN	EQUIPMENT	\$499,963
						DSGN	HVAC	\$2,682
CHESAPEAKE	86-0155	VIRGINIA	72111	UNACCOMPANIED PERSONNEL HOUSING	\$2,600,000	UNFO	CIVIL	\$7,250
						UNFO	CIVIL	\$10,000
						UNFO	DEMOLITION	\$19,820
						UNFO	EARTHWORK	\$3,652
						Total Mods. (\$)		\$626,768
						Mod. Rate (%)		28.87%
						CREQ	PLUMBING	\$4,353
						PLAN	EARTHWORK	\$12,000
						PLAN	EXT. OVHD	\$401
						UNFO	EQUIPMENT	\$57,611
						UNFO	EQUIPMENT	(\$1,970)
						UNFO	EXT. OVHD	\$10,004
						Total Mods. (\$)		\$82,399
						Mod. Rate (%)		3.17%
MIDWEST	83-0006	COLORADO	17115	TRAINING	\$10,200,000	ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						CREQ	CIVIL	\$35,648
						CREQ	CIVIL	\$275,227
						CRIT	CIVIL	\$25,000
						CRIT	CIVIL	\$1,712
						CRIT	DOOR/WINDOW	\$0
						CRIT	ELECTRICAL	\$40,008
						CRIT	PLUMBING	\$9,448
						DSGN	ADMIN	\$0
						DSGN	CIVIL	\$28,124
						DSGN	CIVIL	\$4,696
						DSGN	CIVIL	\$5,052
						DSGN	CIVIL	\$13,805
						DSGN	CIVIL	\$1,881
						DSGN	CIVIL	\$9,586
						DSGN	CIVIL	\$8,292
						DSGN	CIVIL	\$49,127
						DSGN	CIVIL	\$1,300
						DSGN	CIVIL	\$1,399
						DSGN	CIVIL	\$2,178
						DSGN	CIVIL	\$14,006
						DSGN	DOOR/WINDOW	\$1,881
						DSGN	DOOR/WINDOW	\$4,882
						DSGN	ELECTRICAL	\$2,000
						DSGN	ELECTRICAL	\$15,878
						DSGN	HVAC	\$16,030
						DSGN	HVAC	\$1,607
						DSGN	HVAC	\$3,850
						DSGN	HVAC	\$1,850
						DSGN	HVAC	\$3,387
						DSGN	PLUMBING	\$11,574
						ERROR	CIVIL	\$9,616
						ERROR	DOOR/WINDOW	\$25,750
						ERROR	HVAC	\$3,621
						PLAN	ADMIN	\$0
						PLAN	CIVIL	\$200,000
						PLAN	CIVIL	(\$520)
						TIME	TIME	\$0
						UNFO	CIVIL	\$14,799
						UNFO	CIVIL	\$2,398
						UNFO	CIVIL	\$8,449
						UNFO	EARTHWORK	\$29,278
						UNFO	EQUIPMENT	\$4,144
						UNFO	N/A	\$10,663
						UNFO	PLUMBING	\$767
						UNFO	PLUMBING	\$2,000
						UNFO	UTILITIES	\$25,071



EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
MIDWEST	87-0080	ILLINOIS	72111	UNACCOMPANIED PERSONNEL HOUSING	\$3,851,755	UNFO	EARTHWORK	\$18,000
						UNFO	EARTHWORK	(\$347)
						UNFO	ELECTRICAL	\$0
						UNFO	PLUMBING	\$4,082
						UNFO	PLUMBING	\$14,307
						UNFO	PLUMBING	\$11,611
						UNFO	PLUMBING	\$12,478
						UNFO	UTILITIES	\$2,018
							Total Mods. (\$)	\$144,576
							Mod. Rate (%)	4.65%
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						CRIT	CIVIL	\$1,654
						CRIT	ELECTRICAL	\$2,300
						DSGN	CIVIL	\$2,828
MIDWEST	86-0022	ILLINOIS	74020	COMMUNITY	\$2,696,000	DSGN	HVAC	\$292,000
						DSGN	N/A	(\$236,205)
						DSGN	PLUMBING	\$8,017
						TIME	TIME	\$0
						UNFO	DEMOLITION	\$17,152
						UNFO	EARTHWORK	\$0
						UNFO	EARTHWORK	\$4,019
						UNFO	FINISHES	\$8,935
						UNFO	HAZ. WASTE	\$15,031
						UNFO	N/A	\$4,794
						UNFO	PLUMBING	\$1,800
						UNFO	UTILITIES	\$9,263
							Total Mods. (\$)	\$131,588
							Mod. Rate (%)	3.42%
MIDWEST	87-0012	ILLINOIS	72111	UNACCOMPANIED PERSONNEL HOUSING	\$9,579,425	ADMIN	ADMIN	\$0
						ADMIN	TIME	\$0
						CLAIM	CLAIM	\$4,500
						DSGN	CIVIL	\$2,102
						DSGN	CIVIL	\$423
						DSGN	CIVIL	\$500
						DSGN	CIVIL	\$6,603
						DSGN	CIVIL	\$19,160
						DSGN	HVAC	\$1,882
						DSGN	HVAC	\$3,051
						DSGN	PLUMBING	\$1,776
						UNFO	CIVIL	\$8,565
						UNFO	CIVIL	\$10,291
						UNFO	EXT. OVHD	\$9,391
						UNFO	N/A	\$980
MIDWEST	88-0056	ILLINOIS	74021	COMMUNITY	\$2,283,612	UNFO	PLUMBING	\$1,100
						UNFO	UTILITIES	\$321
							Total Mods. (\$)	\$70,645
							Mod. Rate (%)	2.62%
						DSGN	CIVIL	\$2,300
						DSGN	CIVIL	\$10,380
						DSGN	CIVIL	\$13,281
						DSGN	CIVIL	\$2,396
						DSGN	CIVIL	\$58,009
						DSGN	CIVIL	\$10,335
						DSGN	DOOR/WINDOW	\$5,000
						DSGN	DOOR/WINDOW	\$13,230
						DSGN	ELECTRICAL	\$97,000
						DSGN	FINISHES	\$228
						DSGN	HVAC	\$8,977
MIDWEST	88-0056	ILLINOIS	74021	COMMUNITY	\$2,283,612	UNFO	CIVIL	\$9,227
						UNFO	EARTHWORK	\$28,841
						UNFO	ELECTRICAL	\$15,250
						UNFO	ELECTRICAL	\$7,700
						UNFO	ELECTRICAL	\$7,798
						VALUE	N/A	(\$577)
							Total Mods. (\$)	\$289,375
							Mod. Rate (%)	3.02%
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						DSGN	CIVIL	\$1,395
						DSGN	CIVIL	\$775
						DSGN	DOOR/WINDOW	\$1,703
						DSGN	DOOR/WINDOW	\$1,041
						DSGN	DOOR/WINDOW	\$2,521
						DSGN	ELECTRICAL	\$4,500
						DSGN	FINISHES	\$902

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
MIDWEST	87-0075	ILLINOIS	14311	OPERATIONAL	\$3,344,608	DSGN	FINISHES	\$1,465
						DSGN	N/A	\$14,283
						DSGN	N/A	\$6,083
						DSGN	PLUMBING	\$1,073
						DSGN	UTILITIES	(\$16)
						UNFO	ADMIN	\$0
						UNFO	DEMOLITION	(\$20,000)
						UNFO	EARTHWORK	\$2,154
						UNFO	EXT. OVHD	\$14,520
						UNFO	HAZ. WASTE	\$38,289
						UNFO	HAZ. WASTE	\$40,000
						UNFO	HAZ. WASTE	\$30,000
						UNFO	HAZ. WASTE	\$60,000
						UNFO	HAZ. WASTE	\$26,010
						UNFO	N/A	\$0
						Total Mods. (\$)		\$226,698
						Mod. Rate (%)		9.93%
						DSGN	CIVIL	\$5,834
						DSGN	CIVIL	\$3,336
						DSGN	CIVIL	(\$3,000)
						DSGN	EQUIPMENT	\$4,293
						DSGN	FINISHES	\$2,161
						DSGN	HVAC	\$1,592
						DSGN	HVAC	\$32,760
						DSGN	N/A	\$36,955
						DSGN	N/A	\$7,135
						DSGN	PLUMBING	\$5,931
MIDWEST	88-0022	INDIANA	44110	SUPPLY	\$4,785,000	ERROR	UTILITIES	\$2,040
						UNFO	DEMOLITION	\$5,088
						UNFO	DEMOLITION	\$20,000
						UNFO	EARTHWORK	\$20,000
						UNFO	EARTHWORK	\$40,000
						UNFO	N/A	\$6,972
						UNFO	N/A	\$15,171
						Total Mods. (\$)		\$206,268
						Mod. Rate (%)		6.17%
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$25,000
						ADMIN	ADMIN	\$12,000
						DSGN	CIVIL	\$1,982
						DSGN	CIVIL	\$0
						DSGN	CIVIL	(\$370)
MIDWEST	86-0491	MICHIGAN	21105	MAINTENANCE	\$3,885,000	DSGN	CIVIL	\$721
						DSGN	CIVIL	\$5,765
						DSGN	DEMOLITION	\$1,205
						DSGN	DOOR/WINDOW	\$362
						DSGN	ELECTRICAL	\$1,210
						DSGN	ELECTRICAL	\$746
						DSGN	FINISHES	\$4,491
						DSGN	FINISHES	\$56,705
						DSGN	HVAC	\$16,767
						UNFO	CIVIL	\$4,265
						UNFO	CIVIL	(\$23,202)
						UNFO	EARTHWORK	\$25,650
						UNFO	ELECTRICAL	\$8,788
						UNFO	ELECTRICAL	\$19,076
						UNFO	N/A	\$12,454
						UNFO	UTILITIES	\$1,650
						Total Mods. (\$)		\$175,265
						Mod. Rate (%)		3.66%
						CRIT	EARTHWORK	\$6,943
						DSGN	CIVIL	\$12,800
						DSGN	CIVIL	\$8,000
						DSGN	DEMOLITION	\$1,375
						DSGN	EARTHWORK	\$13,482
						PLAN	N/A	\$7,047
						UNFO	DEMOLITION	\$16,423
						UNFO	DEMOLITION	\$23,077

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
MIDWEST	90-0081	ILLINOIS	72114	UNACCOMPANIED PERSONNEL HOUSING	\$9,448,259	UNFO	UTILITIES	\$674
							Total Mods. (\$)	\$89,821
							Mod. Rate (%)	2.31%
						DSGN	CIVIL	\$51,118
						DSGN	CIVIL	\$72,790
						DSGN	CIVIL	\$45,228
						DSGN	CIVIL	\$6,286
						DSGN	CIVIL	\$25,277
						DSGN	ELECTRICAL	\$11,457
						DSGN	ELECTRICAL	\$8,912
						DSGN	FINISHES	\$4,922
						DSGN	FINISHES	\$39,853
						DSGN	N/A	\$38,673
						DSGN	N/A	\$5,435
						DSGN	N/A	\$14,447
						PLAN	EXT. OVHD	\$31,495
						UNFO	CIVIL	\$2,337
						UNFO	HVAC	\$6,577
							Total Mods. (\$)	\$364,807
							Mod. Rate (%)	3.86%
MIDWEST	84-0288	ILLINOIS	17120	TRAINING	\$5,100,000	ADMIN	ADMIN	\$0
						CRIT	CIVIL	\$26,635
						CRIT	ELECTRICAL	\$0
						CRIT	EQUIPMENT	\$2,000
						CRIT	N/A	(\$214)
						CRIT	N/A	\$4,526
						CRIT	N/A	\$1,688
						CRIT	N/A	\$63,860
						CRIT	N/A	\$64,612
						CRIT	PLUMBING	\$50,000
						CRIT	PLUMBING	\$8,400
						CRIT	PLUMBING	\$16,000
						CRIT	PLUMBING	\$44,069
						CRIT	PLUMBING	(\$4,024)
						DSGN	DEMOLITION	\$7,666
						DSGN	ELECTRICAL	\$800
						DSGN	ELECTRICAL	\$5,287
						DSGN	EQUIPMENT	\$6,724
						DSGN	FINISHES	(\$6,839)
						DSGN	FINISHES	\$3,520
						DSGN	N/A	\$0
						DSGN	N/A	\$11,125
						DSGN	N/A	(\$800)
						DSGN	N/A	\$23,768
						DSGN	PLUMBING	\$1,787
						DSGN	PLUMBING	\$3,600
						DSGN	PLUMBING	\$4,700
						DSGN	PLUMBING	\$0
						DSGN	UTILITIES	\$15,000
						DSGN	UTILITIES	\$20,000
						DSGN	UTILITIES	\$21,000
						DSGN	UTILITIES	\$7,000
						TIME	TIME	\$0
						UNFO	N/A	\$500
						UNFO	UTILITIES	\$39,300
							Total Mods. (\$)	\$441,690
							Mod. Rate (%)	8.66%
NORTH	84-0355	MAINE	74038	COMMUNITY	\$1,167,000	ADMIN	ADMIN	\$0
						ADMIN	TIME	\$0
						DSGN	CIVIL	\$2,472
						DSGN	CIVIL	\$2,581
						DSGN	CIVIL	(\$198)
						DSGN	CIVIL	\$1,515
						DSGN	DOOR/WINDOW	\$1,600
						DSGN	DOOR/WINDOW	\$3,499
						DSGN	ELECTRICAL	\$99
						DSGN	ELECTRICAL	\$1,631
						DSGN	FINISHES	(\$267)
						DSGN	FINISHES	(\$3,518)
						DSGN	N/A	\$9,675
						DSGN	PLUMBING	\$1,748
						DSGN	PLUMBING	\$10,835
						DSGN	ROOFING	(\$500)
							Total Mods. (\$)	\$31,172
							Mod. Rate (%)	2.67%
NORTH	85-0099	MAINE		OPERATIONAL	\$1,679,888	ADMIN	ADMIN	\$0

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
NORTH	85-0004	NEW JERSEY	60010	ADMINISTRATIVE	\$1,433,000	ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						CREQ	CIVIL	\$621
						CREQ	ELECTRICAL	\$39,716
						CREQ	ELECTRICAL	\$6,079
						CRIT	EQUIPMENT	\$166,632
						DSGN	CIVIL	\$9,803
						DSGN	CIVIL	\$3,538
						DSGN	DOOR/WINDOW	\$16,926
						DSGN	ELECTRICAL	\$17,022
						DSGN	ELECTRICAL	\$21,281
						DSGN	ELECTRICAL	\$7,830
						DSGN	ELECTRICAL	\$2,047
						DSGN	ELECTRICAL	\$1,190
						DSGN	EQUIPMENT	\$13,008
						DSGN	FINISHES	\$729
						DSGN	HVAC	\$5,328
						DSGN	N/A	\$3,409
						DSGN	PLUMBING	\$960
						ERROR	ELECTRICAL	\$2,006
						TIME	TIME	\$0
						UNFO	ADMIN	\$1,000
						UNFO	CIVIL	\$9,973
						UNFO	CIVIL	\$1,790
						UNFO	CIVIL	(\$2,350)
						UNFO	DEMOLITION	\$15,000
						UNFO	DEMOLITION	\$9,000
						UNFO	ELECTRICAL	(\$2,065)
						UNFO	ELECTRICAL	\$2,500
						UNFO	EXT. OVHD	\$40,646
						UNFO	EXT. OVHD	\$45,354
						UNFO	HAZ. WASTE	\$25,000
						UNFO	HAZ. WASTE	\$11,306
						UNFO	HVAC	\$13,002
						UNFO	N/A	\$3,928
						UNFO	ROOFING	\$355
						Total Mods. (\$)		\$492,564
						Mod. Rate (%)		29.32%
NORTH	87-1076	MAINE	17120	TRAINING	\$1,587,800	ADMIN	ADMIN	\$0
						DSGN	CIVIL	\$0
						DSGN	ELECTRICAL	\$9,590
						DSGN	ELECTRICAL	\$4,519
						DSGN	ELECTRICAL	\$15,147
						DSGN	ELECTRICAL	\$6,991
						DSGN	ELECTRICAL	\$14,182
						DSGN	PLUMBING	\$36,843
						DSGN	PLUMBING	\$36,300
						PLAN	EQUIPMENT	\$7,323
						PLAN	FINISHES	\$70,000
						UNFO	ELECTRICAL	\$13,774
						UNFO	EXT. OVHD	\$52,271
						UNFO	HAZ. WASTE	\$92,000
						UNFO	N/A	\$8,355
						UNFO	N/A	\$2,490
						UNFO	PLUMBING	\$1,549
						UNFO	PLUMBING	\$1,508
						UNFO	PLUMBING	\$8,359
						UNFO	PLUMBING	\$1,526
						Total Mods. (\$)		\$382,727
						Mod. Rate (%)		26.71%
NORTH	84-0507	NEW YORK		UTILITIES IMPROVEMENTS	\$1,128,703	CREQ	CIVIL	(\$25,625)
						CREQ	CIVIL	\$12,500
						CRIT	CIVIL	\$13,000
						CRIT	CIVIL	(\$6,428)
						CRIT	EXT. OVHD	\$8,000
						DSGN	CIVIL	\$1,400
						DSGN	EQUIPMENT	\$52,527
						PLAN	ELECTRICAL	\$9,862
						Total Mods. (\$)		\$65,236
						Mod. Rate (%)		4.11%
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	(\$1,000)
						ADMIN	ADMIN	(\$2,374)
						ADMIN	N/A	(\$2,441)
						DSGN	ELECTRICAL	\$0



EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
NORTH	86-0111	PENNSYLVANIA	72111	UNACCOMPANIED PERSONNEL HOUSING	\$4,820,000	DSGN	PLUMBING	\$16,500
						DSGN	PLUMBING	\$20,000
						DSGN	PLUMBING	\$2,972
						UNFO	ADMIN	(\$17,875)
						UNFO	ADMIN	\$17,875
						UNFO	CIVIL	\$4,000
						UNFO	CIVIL	\$2,918
						UNFO	ELECTRICAL	\$1,453
						UNFO	ELECTRICAL	\$921
						UNFO	PLUMBING	\$2,398
						Total Mods. (\$)		\$45,347
						Mod. Rate (%)		4.02%
						CLAIM	DEMOLITION	\$100,910
						CRIT	ELECTRICAL	\$20,520
						DSGN	ELECTRICAL	\$4,593
						DSGN	N/A	(\$12,878)
						DSGN	ROOFING	(\$4,901)
						DSGN	UTILITIES	\$26,349
						PLAN	EARTHWORK	\$9,846
						PLAN	UTILITIES	\$29,476
NORTH	87-0356	PENNSYLVANIA	21860	MAINTENANCE	\$1,167,000	UNFO	CIVIL	\$79,485
						UNFO	CIVIL	(\$3,560)
						UNFO	DEMOLITION	\$35,143
						UNFO	EARTHWORK	\$7,585
						UNFO	EARTHWORK	\$27,013
						UNFO	EARTHWORK	\$1,558
						UNFO	ELECTRICAL	\$12,662
						UNFO	UTILITIES	\$12,705
						UNFO	UTILITIES	\$2,151
						Total Mods. (\$)		\$348,657
						Mod. Rate (%)		7.23%
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$10,821
						DSGN	CIVIL	\$2,882
						DSGN	PLUMBING	\$5,040
						TIME	TIME	\$0
						UNFO	ADMIN	\$59,795
						UNFO	CIVIL	\$13,001
						UNFO	CIVIL	\$0
						UNFO	CIVIL	\$1,000
						UNFO	CIVIL	\$10,000
						UNFO	EARTHWORK	\$4,760
						UNFO	EARTHWORK	\$2,000
						UNFO	EXT. OVHD	\$6,380
						UNFO	UTILITIES	\$6,651
						UNFO	UTILITIES	\$1,973
						Total Mods. (\$)		\$124,303
						Mod. Rate (%)		10.65%
NORTH	87-0025	NEW JERSEY	61010	ADMINISTRATIVE	\$3,874,100	ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$2,310
						ADMIN	ADMIN	\$0
						CREQ	N/A	\$7,048
						DSGN	HVAC	\$33,401
						ERROR	PLUMBING	\$1,566
						PLAN	ELECTRICAL	\$68,200
						UNFO	DEMOLITION	\$45,397
						UNFO	DEMOLITION	\$2,750
						UNFO	EARTHWORK	\$1,813
						UNFO	ELECTRICAL	\$0
						UNFO	ELECTRICAL	\$2,300
						VALUE	N/A	(\$9,066)
						Total Mods. (\$)		\$155,719
						Mod. Rate (%)		4.02%
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						DSGN	DOOR/WINDOW	\$16,814
						DSGN	ELECTRICAL	\$19,858
						DSGN	ELECTRICAL	\$24,588
						DSGN	ELECTRICAL	\$24,503
						DSGN	FINISHES	\$17,356
						DSGN	FINISHES	\$51,224
						DSGN	FINISHES	\$5,997
						DSGN	HVAC	\$37,267
						DSGN	HVAC	\$60,415
						PLAN	ADMIN	\$68,027
NORTH	83-0013	PENNSYLVANIA	44110	SUPPLY	\$13,451,000	ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						DSGN	DOOR/WINDOW	\$16,814
						DSGN	ELECTRICAL	\$19,858
						DSGN	ELECTRICAL	\$24,588
						DSGN	ELECTRICAL	\$24,503
						DSGN	FINISHES	\$17,356
						DSGN	FINISHES	\$51,224
						DSGN	FINISHES	\$5,997
						DSGN	HVAC	\$37,267
						DSGN	HVAC	\$60,415
						PLAN	ADMIN	\$68,027

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
NORTH	81-0392	PENNSYLVANIA	61020	ADMINISTRATIVE	\$11,250,000	PLAN	EARTHWORK	\$50,000
						TIME	TIME	\$0
						UNFO	ELECTRICAL	\$36,048
						UNFO	ELECTRICAL	(\$2,677)
						UNFO	HVAC	\$100,000
						UNFO	N/A	\$16,506
						UNFO	PLUMBING	\$24,358
						UNFO	PLUMBING	\$5,704
						UNFO	PLUMBING	\$699
						UNFO	ROOFING	\$40,257
						VALUE	CIVIL	(\$125,000)
						VALUE	CIVIL	(\$59,216)
							Total Mods. (\$)	\$412,728
							Mod. Rate (%)	3.07%
						DSGN	ADMIN	\$2,035
						DSGN	CIVIL	\$30,484
						DSGN	CIVIL	\$1,522
						DSGN	DEMOLITION	\$1,233
						DSGN	DEMOLITION	\$14,944
						DSGN	DOOR/WINDOW	\$7,026
						DSGN	ELECTRICAL	\$20,071
						DSGN	ELECTRICAL	\$1,647
						DSGN	ELECTRICAL	\$25,393
						DSGN	ELECTRICAL	\$13,761
						DSGN	ELECTRICAL	\$4,608
						DSGN	ELECTRICAL	\$16,113
						DSGN	ELECTRICAL	\$18,704
						DSGN	ELECTRICAL	\$65,948
						DSGN	ELECTRICAL	\$3,100
						DSGN	N/A	(\$1,627)
						DSGN	PLUMBING	\$18,643
						PLAN	EARTHWORK	\$205,566
						TIME	TIME	\$0
						UNFO	CIVIL	\$7,538
						UNFO	CIVIL	\$9,485
						UNFO	DOOR/WINDOW	(\$40,602)
						UNFO	EARTHWORK	\$423,356
						UNFO	N/A	\$13,768
							Total Mods. (\$)	\$862,716
							Mod. Rate (%)	7.67%
NORTH	87-0041	PENNSYLVANIA	61010	ADMINISTRATIVE	\$1,937,414	DSGN	ELECTRICAL	\$37,521
						DSGN	ELECTRICAL	\$33,398
						DSGN	ELECTRICAL	\$9,769
						DSGN	FINISHES	\$6,823
						DSGN	HAZ. WASTE	\$14,367
						DSGN	HAZ. WASTE	\$10,470
						DSGN	HAZ. WASTE	\$11,200
						DSGN	HVAC	\$1,964
						DSGN	HVAC	\$1,250
						DSGN	PLUMBING	\$20,777
						UNFO	FINISHES	\$5,067
							Total Mods. (\$)	\$152,606
							Mod. Rate (%)	7.88%
NORTH	89-0027	MASS	31930	RDT & E	\$1,632,424	ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						CREQ	CIVIL	\$5,311
						CREQ	CIVIL	\$2,862
						CREQ	ELECTRICAL	\$4,508
						CREQ	FINISHES	\$7,750
						CREQ	FINISHES	\$998
						CREQ	FINISHES	\$896
						CREQ	FINISHES	\$1,087
						CREQ	N/A	\$1,461
						CREQ	N/A	\$226
						CREQ	ROOFING	\$2,208
						DSGN	CIVIL	\$2,537
						DSGN	CIVIL	\$2,431
						DSGN	CIVIL	\$1,250
						DSGN	CIVIL	\$2,694
						DSGN	DEMOLITION	\$1,518
						DSGN	ELECTRICAL	\$2,458
						DSGN	ELECTRICAL	\$253
						DSGN	EXT. OVHD	\$2,566
						DSGN	FINISHES	\$259
						DSGN	FINISHES	\$772
						DSGN	FINISHES	\$1,132
						DSGN	N/A	\$614

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
NORTH	87-0033	CONNECTICUT	82122	UTILITIES IMPROVEMENTS	\$2,866,693	DSGN	PLUMBING	\$2,096
						DSGN	PLUMBING	\$4,100
						DSGN	UTILITIES	\$3,013
						PLAN	EARTHWORK	\$365
						UNFO	DEMOLITION	\$800
						UNFO	EARTHWORK	\$5,960
						UNFO	EARTHWORK	\$6,500
						UNFO	EXT. OVHD	\$8,806
						UNFO	UTILITIES	\$3,710
						Total Mods. (\$)		\$81,141
						Mod. Rate (%)		4.97%
						ADMIN	ADMIN	\$6,000
						DSGN	EQUIPMENT	\$54,728
						DSGN	N/A	\$11,002
						DSGN	ROOFING	\$11,738
						ERROR	ELECTRICAL	\$8,046
						UNFO	DEMOLITION	\$5,767
						UNFO	ELECTRICAL	\$7,637
						UNFO	ELECTRICAL	\$8,399
						UNFO	ELECTRICAL	\$19,563
						UNFO	EXT. OVHD	\$134,110
						UNFO	HAZ. WASTE	\$35,415
NORTH	86-0043	PENNSYLVANIA	74020	COMMUNITY	\$3,088,000	UNFO	N/A	\$6,000
						UNFO	N/A	\$16,390
						UNFO	N/A	\$0
						Total Mods. (\$)		\$324,795
						Mod. Rate (%)		11.33%
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ELECTRICAL	\$0
						ADMIN	N/A	\$0
						DSGN	CIVIL	\$900
						DSGN	FINISHES	(\$677)
						DSGN	ROOFING	(\$5,244)
						PLAN	N/A	\$27,941
						TIME	TIME	\$0
						UNFO	FINISHES	(\$1,635)
						UNFO	UTILITIES	\$5,900
						Total Mods. (\$)		\$27,185
						Mod. Rate (%)		0.88%
NORTH	85-0051	NEW YORK	81230	UTILITIES IMPROVEMENTS	\$2,835,733	CREQ	CIVIL	\$66,041
						DSGN	ELECTRICAL	\$31,286
						DSGN	ELECTRICAL	\$12,511
						DSGN	UTILITIES	\$8,213
						UNFO	CIVIL	\$20,000
						UNFO	EARTHWORK	\$9,753
						UNFO	UTILITIES	\$10,030
						UNFO	UTILITIES	\$17,608
						UNFO	UTILITIES	\$20,000
						UNFO	UTILITIES	\$42,838
						UNFO	UTILITIES	\$61,362
						Total Mods. (\$)		\$299,642
						Mod. Rate (%)		10.57%
PACDIV	92-1319	HAWAII	83110	UTILITIES IMPROVEMENTS	\$5,877,000	DSGN	EARTHWORK	\$1,800
						DSGN	ELECTRICAL	\$0
						DSGN	N/A	\$48,033
						DSGN	N/A	\$13,570
						DSGN	N/A	\$40,686
						DSGN	UTILITIES	\$2,549
						DSGN	UTILITIES	\$58,486
						UNFO	ADMIN	\$11,500
						UNFO	CIVIL	\$30,672
						UNFO	DEMOLITION	\$3,315
						UNFO	DEMOLITION	\$11,255
						UNFO	DEMOLITION	\$14,000
						UNFO	EARTHWORK	\$0
						UNFO	EARTHWORK	\$5,337
						UNFO	EARTHWORK	\$7,255
						UNFO	EARTHWORK	\$16,701
						UNFO	EARTHWORK	\$18,718
						UNFO	EARTHWORK	\$66,335
						UNFO	EARTHWORK	\$11,900
						UNFO	ELECTRICAL	\$10,969
						UNFO	EQUIPMENT	\$10,199
						UNFO	FINISHES	\$166,873

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
PACDIV	89-1315	HAWAII	21710	MAINTENANCE	\$7,744,838	UNFO	FINISHES	\$70,000
						UNFO	N/A	\$252,792
						UNFO	N/A	\$81,966
						UNFO	N/A	(\$4,441)
						UNFO	UTILITIES	(\$4,441)
						Total Mods. (\$)		\$946,029
						Mod. Rate (%)		16.10%
						CREQ	CIVIL	\$1,200,000
						CREQ	CIVIL	(\$121,596)
						CREQ	CIVIL	\$33,547
						CREQ	CIVIL	(\$121,596)
						CREQ	EQUIPMENT	\$4,657
						CREQ	FINISHES	(\$5,343)
						DSGN	CIVIL	\$19,914
PACDIV	88-1317	HAWAII	21640	MAINTENANCE	\$4,869,345	DSGN	FINISHES	(\$7,572)
						DSGN	N/A	\$3,064
						UNFO	CIVIL	\$4,291
						UNFO	FINISHES	\$525
						VALUE	CIVIL	(\$12,914)
						VALUE	CIVIL	(\$6,701)
						VALUE	N/A	(\$12,914)
						VALUE	ROOFING	(\$6,701)
						VALUE	ROOFING	\$22,484
						Total Mods. (\$)		\$993,145
						Mod. Rate (%)		12.82%
						ADMIN	ADMIN	\$0
						CREQ	EXT. OVHD	\$50,000
						CREQ	HVAC	\$21,160
						CREQ	HVAC	\$20,160
PACDIV	85-1376	HAWAII	14365	OPERATIONAL	\$10,449,000	CREQ	N/A	\$22,938
						CRIT	N/A	\$11,989
						DSGN	CIVIL	(\$938,817)
						DSGN	CIVIL	\$2,000
						DSGN	ELECTRICAL	(\$1,021)
						TIME	TIME	\$0
						UNFO	CIVIL	\$18,708
						UNFO	ELECTRICAL	\$1,976
						UNFO	EXT. OVHD	\$0
						UNFO	HAZ. WASTE	\$1,800
						UNFO	PLUMBING	\$6,345
						UNFO	PLUMBING	\$0
						UNFO	UTILITIES	\$1,055
						Total Mods. (\$)		(\$781,707)
						Mod. Rate (%)		-16.05%
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						CREQ	N/A	\$21,000
						CREQ	N/A	\$20,533
						CREQ	N/A	\$108,083
						CRIT	CIVIL	\$142,495
						CRIT	FINISHES	\$1,326
						CRIT	N/A	\$45,000
						DSGN	CIVIL	\$354,000
						DSGN	CIVIL	\$6,477
						DSGN	CIVIL	\$1,779
						DSGN	CIVIL	\$6,541
						DSGN	EARTHWORK	\$1,969
						DSGN	ELECTRICAL	(\$4,403)
						DSGN	FINISHES	\$74,556
						DSGN	FINISHES	\$9,138
						DSGN	HVAC	(\$705)
						DSGN	N/A	\$500,000
						DSGN	N/A	\$295,217
						DSGN	N/A	\$2,501
						DSGN	N/A	\$6,727
						DSGN	N/A	\$1,672
						DSGN	N/A	\$9,645
						DSGN	N/A	\$35,011
						DSGN	N/A	\$30,208
						DSGN	N/A	\$77,933
						DSGN	N/A	\$62,580
						DSGN	N/A	\$38,813
						UNFO	ADMIN	\$0
						UNFO	CIVIL	\$59,560
						UNFO	CIVIL	\$7,330
						UNFO	CIVIL	\$21,074
						UNFO	CIVIL	\$5,940

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
PACDIV	86-1373	HAWAII	84310	UTILITIES IMPROVEMENTS	\$1,323,110	UNFO	CIVIL	(\$1,502)
						UNFO	DEMOLITION	\$18,713
						UNFO	EXT. OVHD	\$32,000
						UNFO	N/A	\$6,992
						UNFO	N/A	\$24,280
						UNFO	UTILITIES	\$31,870
						Total Mods. (\$)		\$2,054,353
						Mod. Rate (%)		19.66%
						DSGN	CIVIL	\$35,000
						DSGN	ELECTRICAL	\$4,342
						DSGN	HAZ. WASTE	\$69,000
						DSGN	PLUMBING	\$6,400
						UNFO	CIVIL	\$8,700
						UNFO	EARTHWORK	\$3,877
PACDIV	85-1463	HAWAII	61010	ADMINISTRATIVE	\$1,869,000	UNFO	EARTHWORK	\$13,745
						UNFO	EARTHWORK	\$5,000
						UNFO	ELECTRICAL	\$13,692
						UNFO	N/A	(\$12,917)
						UNFO	PLUMBING	(\$7,017)
						UNFO	PLUMBING	\$3,788
						UNFO	PLUMBING	\$12,366
						Total Mods. (\$)		\$155,976
						Mod. Rate (%)		11.79%
						ADMIN	ADMIN	\$0
						CREQ	CIVIL	\$10,671
						CRIT	FINISHES	(\$5,721)
						DSGN	CIVIL	\$12,959
						DSGN	CIVIL	\$199
PACDIV	85-1363	HAWAII	14325	OPERATIONAL	\$2,229,150	DSGN	ELECTRICAL	\$9,369
						DSGN	EQUIPMENT	\$8,946
						DSGN	FINISHES	\$1,571
						DSGN	PLUMBING	\$26,174
						DSGN	ROOFING	(\$16,006)
						DSGN	UTILITIES	\$7,026
						SCOPE	N/A	(\$2,717)
						UNFO	ADMIN	(\$10,000)
						UNFO	ELECTRICAL	\$3,875
						UNFO	FINISHES	\$4,525
						UNFO	UTILITIES	\$6,693
						Total Mods. (\$)		\$57,564
						Mod. Rate (%)		3.08%
PACDIV	85-1350	HAWAII	55010	MEDICAL	\$6,744,500	CREQ	CIVIL	\$43,668
						CRIT	EQUIPMENT	\$43,700
						DSGN	ADMIN	\$0
						DSGN	DEMOLITION	\$49,983
						DSGN	EQUIPMENT	\$16,050
						DSGN	PLUMBING	\$3,000
						ERROR	EXT. OVHD	\$4,800
						ERROR	EXT. OVHD	\$9,500
						UNFO	DEMOLITION	\$31,900
						UNFO	EXT. OVHD	\$4,030
						Total Mods. (\$)		\$206,631
						Mod. Rate (%)		9.27%
PACDIV	87-1302	HAWAII	74040	COMMUNITY	\$2,166,900	ADMIN	ADMIN	\$0
						CREQ	N/A	\$54,103
						CREQ	PLUMBING	\$15,705
						CRIT	CIVIL	\$96,505
						CRIT	CIVIL	\$2,806
						CRIT	N/A	\$5,798
						DSGN	FINISHES	\$3,162
						DSGN	HVAC	\$20,921
						UNFO	DEMOLITION	\$10,078
						UNFO	DEMOLITION	\$4,417
						UNFO	EARTHWORK	\$42,665
						UNFO	HAZ. WASTE	\$8,659
						UNFO	N/A	(\$210,016)
						Total Mods. (\$)		\$54,803
						Mod. Rate (%)		0.81%
PACDIV	87-1302	HAWAII	74040	COMMUNITY	\$2,166,900	CRIT	CIVIL	\$13,315
						CRIT	ELECTRICAL	\$8,191
						DSGN	ELECTRICAL	\$2,970
						SCOPE	CIVIL	\$30,096
						TIME	TIME	\$0
						UNFO	EARTHWORK	\$6,882
PACDIV	87-1302	HAWAII	74040	COMMUNITY	\$2,166,900	UNFO	ELECTRICAL	\$8,340
						UNFO	ELECTRICAL	\$8,340

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
PACDIV	88-1319	HAWAII	21420	MAINTENANCE	\$5,327,600	UNFO	PLUMBING	(\$6,189)
						UNFO	UTILITIES	\$1,166
						UNFO	UTILITIES	\$3,674
							Total Mods. (\$)	\$68,445
							Mod. Rate (%)	3.16%
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	(\$36,800)
						CREQ	CIVIL	\$1,428
						CREQ	CIVIL	\$21,045
						CREQ	CIVIL	\$29,840
						CREQ	DOOR/WINDOW	(\$10,143)
						CREQ	ELECTRICAL	(\$3,290)
						CREQ	EQUIPMENT	(\$59,909)
						CRIT	CIVIL	(\$8,071)
						DSGN	CIVIL	\$1,400
						DSGN	ELECTRICAL	\$8,080
						DSGN	EQUIPMENT	\$1,075
						DSGN	EQUIPMENT	\$1,646
						UNFO	CIVIL	\$18,500
						UNFO	DEMOLITION	\$3,295
						UNFO	DEMOLITION	\$9,629
						UNFO	EQUIPMENT	\$1,925
						UNFO	FINISHES	\$1,925
						UNFO	HAZ. WASTE	\$2,853
						UNFO	HAZ. WASTE	\$10,066
						UNFO	HAZ. WASTE	\$1,043
						UNFO	HAZ. WASTE	\$9,351
						UNFO	N/A	\$2,635
						UNFO	N/A	\$3,685
						UNFO	TIME	\$0
						UNFO	UTILITIES	\$7,217
							Total Mods. (\$)	\$18,425
							Mod. Rate (%)	0.35%
PACDIV	85-1462	JOHNSTON ATOLL	74043	COMMUNITY	\$1,937,499	ADMIN	ADMIN	\$0
						PLAN	EXT. OVHD	\$7,525
						UNFO	DEMOLITION	\$34,198
						UNFO	EARTHWORK	\$863
						UNFO	EQUIPMENT	\$2,027
						UNFO	EXT. OVHD	\$6,497
						UNFO	N/A	\$47,000
						UNFO	N/A	\$1,300
						UNFO	PLUMBING	\$5,410
						VALUE	N/A	(\$12,600)
							Total Mods. (\$)	\$92,220
							Mod. Rate (%)	4.76%
PACDIV	85-1333	HAWAII	11665	OPERATIONAL	\$8,000,591	ADMIN	ADMIN	\$0
						DSGN	CIVIL	\$879
						DSGN	ELECTRICAL	\$2,150
						DSGN	ELECTRICAL	\$2,670
						DSGN	N/A	\$41,281
						ERROR	ELECTRICAL	\$40,285
						UNFO	DEMOLITION	\$3,000
						UNFO	DEMOLITION	\$2,000
						UNFO	EARTHWORK	\$20,000
						UNFO	ELECTRICAL	\$4,012
						UNFO	N/A	\$24,889
						UNFO	PLUMBING	\$19,818
						UNFO	PLUMBING	\$1,011
						UNFO	UTILITIES	\$20,000
						UNFO	UTILITIES	\$7,723
							Total Mods. (\$)	\$189,718
							Mod. Rate (%)	2.37%
PACDIV	84-0025	HAWAII	87215	UTILITIES IMPROVEMENTS	\$1,722,000	ADMIN	ADMIN	\$0
						CRIT	CIVIL	\$1,303
						CRIT	CIVIL	\$8,000
						DSGN	CIVIL	\$410
						DSGN	FINISHES	\$429
						DSGN	N/A	\$1,381
						DSGN	UTILITIES	\$0
						DSGN	UTILITIES	\$10,724
						UNFO	CIVIL	\$812
						UNFO	CIVIL	\$2,629
						UNFO	CIVIL	\$2,334
						UNFO	DEMOLITION	\$490
						UNFO	DEMOLITION	\$9,275
						UNFO	EARTHWORK	\$2,400

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
PACDIV	85-1335	HAWAII	21410	MAINTENANCE	\$5,773,945	UNFO	HVAC	(\$43,146)
						UNFO	N/A	\$608
						UNFO	PLUMBING	\$179
						UNFO	PLUMBING	\$9,890
						UNFO	UTILITIES	\$2,400
							Total Mods. (\$)	\$10,118
							Mod. Rate (%)	0.59%
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						CRIT	ADMIN	\$17,600
						CRIT	CIVIL	\$4,000
						DSGN	CIVIL	\$21,706
						DSGN	EXT. OVHD	\$17,000
						DSGN	N/A	\$46,715
						UNFO	CIVIL	\$20,359
PACDIV	86-0255	GUAM	51010	MEDICAL	\$9,377,000	UNFO	EARTHWORK	\$8,500
						UNFO	EARTHWORK	\$3,996
						UNFO	EARTHWORK	\$245
						UNFO	ELECTRICAL	\$5,417
						UNFO	N/A	(\$2,400)
						UNFO	UTILITIES	(\$659)
						UNFO	UTILITIES	\$3,545
							Total Mods. (\$)	\$146,024
							Mod. Rate (%)	2.53%
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						DSGN	CIVIL	\$11,257
						DSGN	ELECTRICAL	\$0
						DSGN	ELECTRICAL	\$1,659
						TIME	TIME	\$0
SOUTHWESTDIV	83-2440	CALIFORNIA	21105	MAINTENANCE	\$4,367,000	TIME	TIME	\$0
						UNFO	CIVIL	\$0
						UNFO	DEMOLITION	\$13,754
						UNFO	DOOR/WINDOW	(\$14,182)
						UNFO	EARTHWORK	(\$14,521)
						UNFO	ELECTRICAL	\$83,267
						UNFO	UTILITIES	\$4,021
						UNFO	UTILITIES	\$5,646
						UNFO	UTILITIES	\$29,884
						VALUE	EARTHWORK	(\$35,000)
						VALUE	EARTHWORK	(\$16,165)
						VALUE	EARTHWORK	\$0
							Total Mods. (\$)	\$69,620
							Mod. Rate (%)	0.74%
SOUTHWESTDIV	84-4330	CALIFORNIA	21105	MAINTENANCE	\$9,549,401	ADMIN	ADMIN	\$0
						CLAIM	CLAIM	\$50,003
						CLAIM	EARTHWORK	\$33,632
						CLAIM	PLUMBING	\$40,051
						CREQ	ELECTRICAL	(\$2,385)
						CRIT	ELECTRICAL	\$1,466
						CRIT	N/A	(\$7,000)
						CRIT	N/A	(\$1,750)
						DSGN	CIVIL	\$5,825
						DSGN	DOOR/WINDOW	\$383
						DSGN	ELECTRICAL	\$12,117
						DSGN	ELECTRICAL	\$2,048
						DSGN	N/A	\$859
						DSGN	N/A	\$2,677
						DSGN	N/A	\$34,196
SOUTHWESTDIV	84-4330	CALIFORNIA	21105	MAINTENANCE	\$9,549,401	DSGN	N/A	\$2,196
						DSGN	ROOFING	(\$1,655)
						IDEA	PLUMBING	(\$1,200)
						UNFO	HVAC	\$3,997
						UNFO	N/A	\$23,786
						UNFO	UTILITIES	\$3,080
							Total Mods. (\$)	\$202,326
							Mod. Rate (%)	4.63%
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						CRIT	N/A	\$16,926
						DSGN	CIVIL	\$7,846
						DSGN	DOOR/WINDOW	\$4,675
						DSGN	ELECTRICAL	\$804
						DSGN	ELECTRICAL	\$991
						DSGN	ELECTRICAL	\$180
						DSGN	ELECTRICAL	\$1,460

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
SOUTHWESTDIV	85-5164	CALIFORNIA	14140	OPERATIONAL	\$1,891,580	DSGN	N/A	\$24,700
						DSGN	N/A	\$1,025
						DSGN	N/A	\$380
						PLAN	CIVIL	(\$24,885)
						UNFO	CIVIL	\$1,126
						UNFO	CIVIL	\$1,880
						UNFO	CIVIL	\$2,605
						UNFO	EARTHWORK	\$66,372
						UNFO	EARTHWORK	\$34,347
						UNFO	ELECTRICAL	\$2,502
						UNFO	N/A	\$250
						UNFO	N/A	\$2,133
						UNFO	N/A	(\$7,071)
						UNFO	N/A	\$663
						UNFO	PLUMBING	\$1,145
							Total Mods. (\$)	\$140,054
							Mod. Rate (%)	1.47%
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						CRIT	CIVIL	(\$1,518)
						CRIT	ELECTRICAL	(\$6,745)
						CRIT	N/A	(\$6,563)
						DSGN	CIVIL	\$860
						DSGN	CIVIL	\$1,026
						DSGN	CIVIL	\$938
						DSGN	CIVIL	\$14,793
						DSGN	CIVIL	\$17,026
						DSGN	DOOR/WINDOW	\$1,110
						DSGN	ELECTRICAL	\$2,801
						DSGN	ELECTRICAL	\$596
						DSGN	ELECTRICAL	\$3,358
						DSGN	N/A	\$1,307
						DSGN	N/A	\$8,631
						DSGN	N/A	\$5,006
						IDEA	CIVIL	(\$305)
						PLAN	CIVIL	\$967
						UNFO	DEMOLITION	\$16,676
						UNFO	ELECTRICAL	\$8,529
						UNFO	EXT. OVHD	\$8,598
						UNFO	EXT. OVHD	\$8,777
							Total Mods. (\$)	\$85,868
							Mod. Rate (%)	4.54%
SOUTHWESTDIV	90-1003	CALIFORNIA	17950	TRAINING	\$1,931,919	ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						CRIT	ELECTRICAL	(\$1,906)
						DSGN	CIVIL	\$160,957
						DSGN	CIVIL	\$153,088
						DSGN	ELECTRICAL	\$24,400
						DSGN	ELECTRICAL	\$71,299
						SCOPE	N/A	\$45,162
						SCOPE	N/A	\$80,884
						UNFO	CIVIL	\$37,435
						UNFO	EARTHWORK	\$97,170
						UNFO	EARTHWORK	\$36,153
						UNFO	EXT. OVHD	\$75,000
						UNFO	EXT. OVHD	\$28,343
							Total Mods. (\$)	\$807,985
							Mod. Rate (%)	41.82%
SOUTHWESTDIV	86-0149	CALIFORNIA	21230	MAINTENANCE	\$9,739,000	ADMIN	ADMIN	\$0
						CREQ	CIVIL	\$2,348
						CREQ	CIVIL	\$11,059
						CREQ	EQUIPMENT	\$11,572
						CREQ	N/A	(\$9,597)
						CRIT	ADMIN	(\$5,000)
						CRIT	CIVIL	\$14,165
						CRIT	CIVIL	\$12,612
						CRIT	EQUIPMENT	\$7,255
						CRIT	PLUMBING	\$5,000
						DSGN	CIVIL	\$5,033
						DSGN	CIVIL	\$4,934
						DSGN	CIVIL	\$9,727
						DSGN	DOOR/WINDOW	\$1,093
						DSGN	DOOR/WINDOW	\$1,719
						DSGN	ELECTRICAL	\$7,484
						DSGN	ELECTRICAL	(\$8,919)
						DSGN	ELECTRICAL	\$9,760



EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
SOUTHWESTDIV	86-0228	CALIFORNIA	17120	TRAINING	\$5,163,724	DSGN	FINISHES	\$5,681
						DSGN	N/A	(\$29,623)
						DSGN	N/A	\$3,030
						DSGN	N/A	\$887
						DSGN	N/A	\$1,720
						DSGN	PLUMBING	\$10,982
						DSGN	UTILITIES	\$11,833
						DSGN	UTILITIES	\$1,975
						DSGN	UTILITIES	\$474
						UNFO	UTILITIES	\$1,601
						Total Mods. (\$)		\$88,805
						Mod. Rate (%)		0.91%
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						CREQ	CIVIL	\$5,000
						CREQ	CIVIL	\$698
						CREQ	EXT. OVHD	\$490
						CREQ	N/A	\$1,276
						CRIT	CIVIL	\$6,045
						CRIT	EQUIPMENT	\$5,000
						CRIT	N/A	(\$6,218)
						CRIT	N/A	(\$1,384)
						CRIT	N/A	\$18,767
						CRIT	N/A	(\$5,000)
						CRIT	PLUMBING	\$0
						CRIT	PLUMBING	\$5,384
						DSGN	DEMOLITION	\$30,000
						DSGN	DOOR/WINDOW	\$0
						DSGN	EARTHWORK	\$19,153
						DSGN	EARTHWORK	\$15,150
						DSGN	EARTHWORK	\$16,441
						DSGN	ELECTRICAL	\$2,100
						DSGN	EQUIPMENT	\$50,000
						DSGN	FINISHES	\$1,300
						DSGN	FINISHES	\$135
						DSGN	FINISHES	\$1,035
						DSGN	FINISHES	\$206
						DSGN	FINISHES	\$548
						DSGN	FINISHES	\$970
						DSGN	HVAC	\$23,559
						DSGN	N/A	\$737
						DSGN	N/A	\$3,589
						DSGN	N/A	\$11,603
						DSGN	N/A	\$3,399
						DSGN	N/A	\$0
						DSGN	N/A	\$5,416
						DSGN	N/A	\$8,500
						DSGN	N/A	\$9,203
						DSGN	PLUMBING	\$7,787
						DSGN	PLUMBING	\$193
						UNFO	CIVIL	(\$137)
						UNFO	DEMOLITION	\$7,620
						UNFO	EARTHWORK	\$2,773
						UNFO	FINISHES	\$592
						UNFO	N/A	\$700
						VALUE	N/A	(\$5,885)
						Total Mods. (\$)		\$246,745
						Mod. Rate (%)		4.78%
SOUTHWESTDIV	89-6675	CALIFORNIA	42172	SUPPLY	\$7,456,000	ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						CREQ	N/A	\$4,293
						DSGN	ADMIN	\$0
						DSGN	CIVIL	\$17,155
						DSGN	CIVIL	\$3,199
						DSGN	CIVIL	\$41,700
						DSGN	CIVIL	\$32,374
						DSGN	ELECTRICAL	\$46,037
						DSGN	ELECTRICAL	\$7,756
						DSGN	ELECTRICAL	\$19,914
						DSGN	N/A	\$9,361
						DSGN	N/A	\$5,110
						DSGN	PLUMBING	\$7,375
						UNFO	CIVIL	\$24,999
						UNFO	N/A	\$5,243

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
SOUTHWESTDIV	91-0114	CALIFORNIA	42172	SUPPLY	\$2,208,737	CREQ DSGN DSGN DSGN DSGN DSGN DSGN UNFO VALUE	Total Mods. (\$) \$224,516 Mod. Rate (%) 3.01%	
							EARTHWORK	\$11,423
							CIVIL	\$20,862
							CIVIL	\$10,356
							CIVIL	\$2,513
							CIVIL	\$20,000
							HVAC	\$10,000
							UTILITIES	\$4,048
							EARTHWORK	\$24,543
							CIVIL	(\$23,745)
SOUTHWESTDIV	87-7868	CALIFORNIA	21710	MAINTENANCE	\$1,443,421	CREQ CREQ CREQ CREQ CREQ UNFO UNFO	Total Mods. (\$) \$80,000 Mod. Rate (%) 3.62%	
							CIVIL	\$18,346
							CIVIL	\$3,095
							ELECTRICAL	\$5,524
							ELECTRICAL	\$3,685
							FINISHES	\$2,061
							DEMOLITION	\$0
							N/A	\$1,251
							Total Mods. (\$) \$33,962 Mod. Rate (%) 2.35%	
SOUTHWESTDIV	91-0187	CALIFORNIA	74023	COMMUNITY	\$1,668,800	ADMIN ADMIN ADMIN CREQ CREQ CREQ CREQ DSGN SCOPE SCOPE SCOPE SCOPE SCOPE UNFO UNFO UNFO	ADMIN	\$0
							ADMIN	\$0
							ADMIN	\$0
							CIVIL	\$34,285
							CIVIL	\$1,161
							EARTHWORK	\$17,655
							FINISHES	\$1,760
							DEMOLITION	(\$1,069)
							CIVIL	\$41,356
							CIVIL	(\$6,005)
							EARTHWORK	\$59,895
							FINISHES	\$23,215
							N/A	\$37,701
							EXT. OVHD	\$1,887
							N/A	\$1,788
							UTILITIES	\$854
							Total Mods. (\$) \$214,483 Mod. Rate (%) 12.85%	
SOUTHWESTDIV	85-5275	CALIFORNIA	15120	OPERATIONAL	\$2,443,637	ADMIN ADMIN ADMIN ADMIN CREQ CRIT CRIT CRIT DSGN DSGN UNFO UNFO UNFO UNFO	ADMIN	\$0
							ADMIN	\$0
							ADMIN	\$0
							ADMIN	\$0
							N/A	\$1,463
							ELECTRICAL	(\$7,621)
							ELECTRICAL	\$16,130
							EQUIPMENT	(\$11,787)
							CIVIL	\$2,543
							PLUMBING	\$5,843
							CIVIL	\$7,285
							ELECTRICAL	\$563
							EXT. OVHD	\$5,401
							N/A	\$1,133
							Total Mods. (\$) \$20,953 Mod. Rate (%) 0.86%	
SOUTHWESTDIV	85-5318	CALIFORNIA	14335	OPERATIONAL	\$1,514,539	ADMIN CREQ CREQ DSGN DSGN DSGN DSGN UNFO UNFO UNFO UNFO	ADMIN	\$0
							N/A	\$723
							N/A	\$5,734
							ELECTRICAL	\$1,292
							FINISHES	\$7,559
							PLUMBING	\$3,774
							UTILITIES	\$5,869
							CIVIL	\$4,562
							CIVIL	\$4,864
							DEMOLITION	\$4,866
SOUTHWESTDIV	87-8825	CALIFORNIA	31725	RDT & E	\$3,022,200	ADMIN ADMIN ADMIN ADMIN ADMIN	PLUMBING	\$6,922
							Total Mods. (\$) \$46,165 % Change Order 3.05%	
							ADMIN	\$0
							ADMIN	\$0
							ADMIN	\$0
							ADMIN	\$0

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
SOUTHWESTDIV	87-8829	CALIFORNIA	74074	COMMUNITY	\$1,920,000	ADMIN	ADMIN	\$0
						CREQ	DOOR/WINDOW	(\$1,110)
						CREQ	FINISHES	(\$4,600)
						CREQ	FINISHES	\$7,000
						CREQ	N/A	\$0
						CREQ	PLUMBING	\$4,275
						CRIT	N/A	(\$6,365)
						DSGN	CIVIL	(\$19,159)
						DSGN	CIVIL	\$2,881
						DSGN	CIVIL	\$1,658
						DSGN	CIVIL	\$7,000
						DSGN	ELECTRICAL	\$870
						DSGN	ELECTRICAL	\$0
						DSGN	ELECTRICAL	\$4,327
						DSGN	ELECTRICAL	\$12,288
						DSGN	ELECTRICAL	\$33,500
						DSGN	ELECTRICAL	\$8,775
						DSGN	ELECTRICAL	\$4,735
						DSGN	ELECTRICAL	\$5,365
						DSGN	FINISHES	\$1,110
						DSGN	FINISHES	\$3,150
						DSGN	N/A	\$1,300
						DSGN	N/A	\$0
						DSGN	N/A	(\$833)
						DSGN	N/A	(\$150)
						DSGN	N/A	\$3,595
						DSGN	N/A	\$6,000
						DSGN	N/A	\$575
						DSGN	N/A	\$1,050
						DSGN	N/A	\$1,170
						DSGN	N/A	\$2,788
						DSGN	PLUMBING	(\$181)
						PLAN	CIVIL	\$28,073
						TIME	TIME	\$0
						TIME	TIME	\$0
						UNFO	FINISHES	\$8,000
						UNFO	N/A	\$1,039
						UNFO	N/A	\$500
						Total Mods. (\$)		\$118,626
						Mod. Rate (%)		3.93%
SOUTHWESTDIV	87-8809	CALIFORNIA	72114	UNACCOMPANIED PERSONNEL HOUSING	\$3,908,871	CLAIM	CLAIM	\$915
						CLAIM	CLAIM	\$8,000
						CREQ	CIVIL	\$50,000
						CREQ	CIVIL	\$17,363
						CREQ	ELECTRICAL	\$5,671
						CREQ	FINISHES	\$9,500
						CREQ	N/A	\$195
						CREQ	N/A	\$0
						CREQ	N/A	\$3,140
						CREQ	PLUMBING	\$1,009
						DSGN	CIVIL	\$3,060
						DSGN	CIVIL	\$1,254
						DSGN	CIVIL	\$2,715
						DSGN	CIVIL	\$3,625
						DSGN	CIVIL	\$2,576
						DSGN	EARTHWORK	\$3,348
						DSGN	ELECTRICAL	\$1,438
						DSGN	EQUIPMENT	(\$300)
						DSGN	FINISHES	\$5,047
						DSGN	FINISHES	\$3,404
						DSGN	FINISHES	\$452
						DSGN	N/A	\$900
						DSGN	N/A	\$2,180
						DSGN	N/A	\$3,185
						DSGN	N/A	\$2,256
						DSGN	N/A	\$6,750
						DSGN	ROOFING	\$0
						DSGN	UTILITIES	\$1,288
						UNFO	EARTHWORK	\$14,135
						Total Mods. (\$)		\$153,106
						Mod. Rate (%)		7.97%
SOUTHWESTDIV	87-8809	CALIFORNIA	72114	UNACCOMPANIED PERSONNEL HOUSING	\$3,908,871	ADMIN	ADMIN	\$0
						CREQ	CIVIL	(\$160,063)
						CREQ	DOOR/WINDOW	(\$4,534)
						DSGN	CIVIL	\$1,600
						DSGN	DEMOLITION	\$1,000
						DSGN	DEMOLITION	\$1,927
						DSGN	DEMOLITION	\$1,051

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
NORTHWEST	93-2142	WASHINGTON	74064	COMMUNITY	\$2,127,435	DSGN	DOOR/WINDOW	\$4,862
						DSGN	DOOR/WINDOW	\$2,135
						DSGN	ELECTRICAL	\$887
						DSGN	FINISHES	\$3,366
						DSGN	HVAC	\$2,775
						DSGN	N/A	\$1,166
						DSGN	N/A	(\$1,082)
						DSGN	N/A	\$360
						DSGN	N/A	\$0
						DSGN	N/A	\$2,416
						DSGN	N/A	\$4,000
						DSGN	N/A	\$1,800
						DSGN	N/A	\$2,072
						DSGN	N/A	\$589
						DSGN	ROOFING	\$2,807
						DSGN	UTILITIES	(\$950)
						TIME	TIME	\$0
						TIME	TIME	\$0
						UNFO	CIVIL	\$100,000
						UNFO	DEMOLITION	\$0
						UNFO	DEMOLITION	\$4,000
						UNFO	DEMOLITION	\$78
						UNFO	DEMOLITION	\$17,012
						UNFO	ELECTRICAL	\$100,000
						UNFO	ELECTRICAL	\$1,920
						UNFO	N/A	\$900
						UNFO	N/A	(\$298)
						UNFO	N/A	\$20,000
						UNFO	N/A	\$1,928
						UNFO	N/A	\$935
						UNFO	N/A	\$848
						UNFO	UTILITIES	\$67,125
						UNFO	UTILITIES	\$107,620
						UNFO	UTILITIES	\$150,000
						Total Mods. (\$)		\$440,252
						Mod. Rate (%)		11.26%
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						CREQ	CIVIL	\$2,897
						CREQ	ELECTRICAL	\$711
						CREQ	FINISHES	\$1,267
						CREQ	FINISHES	\$1,319
						CREQ	FINISHES	\$615
						DSGN	CIVIL	\$2,955
						DSGN	DOOR/WINDOW	\$1,486
						DSGN	FINISHES	\$301
						DSGN	FINISHES	\$6,895
						DSGN	FINISHES	\$1,650
						DSGN	HVAC	\$1,891
						DSGN	N/A	(\$660)
						DSGN	N/A	\$456
						DSGN	PLUMBING	\$4,808
						DSGN	PLUMBING	\$13,559
						DSGN	PLUMBING	\$0
						DSGN	PLUMBING	\$4,000
						PLAN	ADMIN	\$747
						UNFO	PLUMBING	\$3,514
						UNFO	UTILITIES	\$4,480
						Total Mods. (\$)		\$52,891
						Mod. Rate (%)		2.49%
NORTHWEST	88-3283	WASHINGTON	74009	COMMUNITY	\$2,896,000	ADMIN	ADMIN	\$0
						CLAIM	ELECTRICAL	\$10,576
						CREQ	CIVIL	\$0
						CREQ	CIVIL	\$1,006
						CREQ	CIVIL	\$0
						CREQ	DOOR/WINDOW	\$4,685
						CREQ	DOOR/WINDOW	\$0
						CREQ	ELECTRICAL	(\$5,510)
						CREQ	FINISHES	\$4,310
						CREQ	FINISHES	\$2,950
						CREQ	PLUMBING	\$7,915
						CREQ	PLUMBING	\$0
						CREQ	PLUMBING	\$4,030
						CREQ	ROOFING	\$12,806
						CREQ	ROOFING	\$13,508
						DSGN	FINISHES	\$2,559

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
NORTHWEST	92-3502	WASHINGTON	83116	UTILITIES IMPROVEMENTS	\$4,282,259	DSGN	FINISHES	\$0
							Total Mods. (\$)	\$58,835
							Mod. Rate (%)	2.03%
						ADMIN	ADMIN	\$0
						CLAIM	CLAIM	\$140,927
						CLAIM	DEMOLITION	\$0
						CREQ	N/A	\$4,250
						CREQ	N/A	\$926
						DSGN	CIVIL	\$15,635
						DSGN	CIVIL	\$22,302
						DSGN	CIVIL	\$9,088
						DSGN	CIVIL	\$6,210
						DSGN	CIVIL	\$2,671
						DSGN	ELECTRICAL	\$9,266
						DSGN	EQUIPMENT	\$5,909
						DSGN	N/A	\$6,100
						DSGN	N/A	\$4,800
						DSGN	N/A	\$734
						DSGN	N/A	\$7,500
						DSGN	PLUMBING	\$2,340
						DSGN	PLUMBING	\$1,450
						DSGN	UTILITIES	\$4,044
						DSGN	UTILITIES	\$6,091
						ERROR	PLUMBING	\$3,336
						PLAN	N/A	\$4,075
						UNFO	ELECTRICAL	\$773
						UNFO	N/A	\$9,878
NORTHWEST	93-9083	WASHINGTON	83116	UTILITIES IMPROVEMENTS	\$1,045,000		Total Mods. (\$)	\$268,305
							Mod. Rate (%)	6.27%
						CRIT	PLUMBING	\$1,548
						CREQ	UTILITIES	\$4,795
						CRIT	ADMIN	(\$14,424)
						CRIT	ADMIN	(\$1,886)
						DSGN	DOOR/WINDOW	\$0
						ERROR	ADMIN	\$5,000
						ERROR	ELECTRICAL	\$0
						UNFO	ADMIN	\$3,652
						UNFO	ADMIN	\$5,102
						UNFO	ADMIN	\$0
							Total Mods. (\$)	\$3,787
							Mod. Rate (%)	0.36%
NORTHWEST	94-7436	WASHINGTON	61010	ADMINISTRATIVE	\$2,618,000	CREQ	ADMIN	\$1,290
						CREQ	CIVIL	(\$1,166)
						CREQ	ELECTRICAL	\$176
						CREQ	ELECTRICAL	\$310
						CREQ	ELECTRICAL	\$1,256
						CREQ	ELECTRICAL	\$4,447
						CREQ	ELECTRICAL	(\$314)
						CREQ	ELECTRICAL	(\$127)
						CREQ	ELECTRICAL	\$1,827
						CREQ	FINISHES	\$2,278
						CREQ	FINISHES	\$3,062
						CREQ	FINISHES	(\$1,755)
						CREQ	FINISHES	\$5,000
						CREQ	PLUMBING	(\$1,112)
						CRIT	HVAC	(\$182)
						DSGN	ADMIN	\$1,765
						DSGN	ADMIN	\$0
						DSGN	CIVIL	\$2,150
						DSGN	CIVIL	\$1,500
						DSGN	CIVIL	\$414
						DSGN	CIVIL	\$297
						DSGN	CIVIL	\$5,387
						DSGN	CIVIL	\$1,650
						DSGN	CIVIL	\$61
						DSGN	CIVIL	\$3,479
						DSGN	CIVIL	\$0
						DSGN	CIVIL	\$844
						DSGN	CIVIL	\$4,407
						DSGN	CIVIL	\$869
						DSGN	CIVIL	\$1,657
						DSGN	CIVIL	\$1,351
						DSGN	CIVIL	\$5,217
						DSGN	CIVIL	\$16,182
						DSGN	CIVIL	\$1,593
						DSGN	CIVIL	\$1,015
						DSGN	CIVIL	\$1,129

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
NORTHWEST	86-0144	WASHINGTON	44110	SUPPLY	\$8,343,000	DSGN	CIVIL	\$1,129
						DSGN	CIVIL	\$1,000
						DSGN	CIVIL	\$6,592
						DSGN	DOOR/WINDOW	\$659
						DSGN	DOOR/WINDOW	\$265
						DSGN	DOOR/WINDOW	\$1,798
						DSGN	DOOR/WINDOW	\$343
						DSGN	DOOR/WINDOW	\$4,033
						DSGN	DOOR/WINDOW	\$398
						DSGN	EARTHWORK	\$0
						DSGN	ELECTRICAL	\$800
						DSGN	ELECTRICAL	\$638
						DSGN	ELECTRICAL	\$611
						DSGN	ELECTRICAL	\$3,654
						DSGN	ELECTRICAL	\$731
						DSGN	ELECTRICAL	\$2,099
						DSGN	ELECTRICAL	(\$613)
						DSGN	ELECTRICAL	\$617
						DSGN	FINISHES	\$3,817
						DSGN	FINISHES	\$750
						DSGN	FINISHES	\$730
						DSGN	FINISHES	(\$730)
						DSGN	FINISHES	\$635
						DSGN	HVAC	\$2,810
						DSGN	HVAC	\$15,000
						DSGN	HVAC	\$26,262
						DSGN	HVAC	\$719
						DSGN	HVAC	\$3,965
						DSGN	HVAC	\$727
						DSGN	PLUMBING	\$12,093
						DSGN	PLUMBING	\$801
						DSGN	PLUMBING	\$2,121
						DSGN	PLUMBING	\$4,878
						DSGN	UTILITIES	(\$545)
						DSGN	UTILITIES	(\$4,762)
						UNFO	ADMIN	\$0
						UNFO	CIVIL	\$5,945
						UNFO	EARTHWORK	\$12,000
						UNFO	EARTHWORK	\$424
						UNFO	EARTHWORK	\$0
						UNFO	EARTHWORK	\$10,000
						UNFO	EARTHWORK	\$5,087
						UNFO	ELECTRICAL	\$28,156
						UNFO	ELECTRICAL	\$670
						UNFO	ELECTRICAL	\$135
						UNFO	UTILITIES	\$1,018
						Total Mods. (\$)		\$223,417
						Mod. Rate (%)		8.53%
						CLAIM	CIVIL	(\$5,584)
						CLAIM	TIME	\$0
						CREQ	CIVIL	\$4,700
						CREQ	DOOR/WINDOW	\$26,973
						CREQ	ELECTRICAL	\$63,603
						CREQ	EQUIPMENT	\$175,282
						CREQ	EQUIPMENT	\$352,720
						CREQ	UTILITIES	(\$7,759)
						CRIT	CIVIL	\$2,355
						CRIT	ELECTRICAL	\$41,125
						CRIT	ELECTRICAL	(\$4,642)
						CRIT	ELECTRICAL	(\$63,760)
						DSGN	ADMIN	\$0
						DSGN	CIVIL	\$18,636
						DSGN	CIVIL	(\$11,205)
						DSGN	CIVIL	\$61,968
						DSGN	CIVIL	\$12,397
						DSGN	CIVIL	\$0
						DSGN	CIVIL	\$0
						DSGN	CIVIL	(\$2,303)
						DSGN	DOOR/WINDOW	\$17,569
						DSGN	EARTHWORK	\$25,398
						DSGN	ELECTRICAL	\$4,394
						DSGN	ELECTRICAL	\$2,276
						DSGN	ELECTRICAL	\$486
						DSGN	ELECTRICAL	\$2,180
						DSGN	ELECTRICAL	(\$3,129)
						DSGN	FINISHES	(\$1,724)
						DSGN	HVAC	\$999
						DSGN	HVAC	\$1,844
						DSGN	PLUMBING	\$3,300

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
NORTHWEST	94-7339	WASHINGTON	15120	OPERATIONAL	\$3,373,000	DSGN	UTILITIES	\$4,829
						PLAN	FINISHES	\$0
						TIME	TIME	\$638
						UNFO	ADMIN	\$46,610
						UNFO	EARTHWORK	\$83,245
						UNFO	HAZ. WASTE	\$53,828
							Total Mods. (\$)	\$907,249
							Mod. Rate (%)	10.87%
						CREQ	ADMIN	\$774
						CREQ	CIVIL	(\$41,194)
						CREQ	CIVIL	\$41,194
						CREQ	CIVIL	(\$6,675)
						CREQ	CIVIL	\$70,073
						CREQ	CIVIL	\$189,927
						CREQ	CIVIL	\$499,454
						CREQ	CIVIL	\$74,155
						CREQ	CIVIL	\$200,615
						CREQ	EARTHWORK	\$2,869
						CREQ	ELECTRICAL	\$37,933
						CREQ	ELECTRICAL	\$0
						CREQ	EQUIPMENT	\$19,360
						DSGN	CIVIL	\$5,969
						DSGN	CIVIL	\$25,350
						DSGN	CIVIL	\$9,737
						DSGN	CIVIL	\$4,670
						DSGN	CIVIL	\$787
						DSGN	CIVIL	\$4,237
						DSGN	CIVIL	\$10,653
						DSGN	CIVIL	\$1,678
						DSGN	CIVIL	\$4,771
						DSGN	CIVIL	\$2,215
						DSGN	DEMOLITION	\$2,989
						DSGN	EARTHWORK	\$1,195
						DSGN	EARTHWORK	\$9,818
						DSGN	ELECTRICAL	\$8,881
						DSGN	ELECTRICAL	\$9,539
						DSGN	ELECTRICAL	\$1,480
						DSGN	UTILITIES	\$30,454
						IDEA	ELECTRICAL	(\$7,452)
						PLAN	CIVIL	\$29,607
						PLAN	CIVIL	\$88,064
						UNFO	ADMIN	(\$5,000)
						UNFO	CIVIL	(\$40,000)
						UNFO	CIVIL	\$16,607
						UNFO	CIVIL	\$21,294
						UNFO	CIVIL	\$155,000
						UNFO	CIVIL	\$2,273
						UNFO	DEMOLITION	\$0
						UNFO	ELECTRICAL	\$13,296
						UNFO	ELECTRICAL	\$3,854
						UNFO	PLUMBING	\$5,241
						UNFO	PLUMBING	\$14,675
						UNFO	UTILITIES	\$8,657
							Total Mods. (\$)	\$1,529,024
							Mod. Rate (%)	45.33%
NORTHWEST	90-1082	WASHINGTON	15120	OPERATIONAL	\$5,528,000	CREQ	ELECTRICAL	\$0
						CREQ	ELECTRICAL	(\$27,727)
						CREQ	ELECTRICAL	\$167,100
						CREQ	ELECTRICAL	(\$1,713)
						CREQ	ELECTRICAL	\$3,922
						CREQ	ELECTRICAL	\$2,017
						CREQ	ELECTRICAL	\$9,335
						CREQ	TIME	\$0
						CREQ	UTILITIES	\$5,545
						CRIT	ELECTRICAL	(\$3,288)
						DSGN	CIVIL	\$10,000
						DSGN	ELECTRICAL	\$10,135
						DSGN	ELECTRICAL	\$0
						DSGN	EQUIPMENT	\$7,671
						DSGN	HVAC	\$1,212
						DSGN	UTILITIES	\$0
						DSGN	UTILITIES	(\$17,129)
						DSGN	UTILITIES	\$15,178
						DSGN	UTILITIES	\$1,959
						DSGN	UTILITIES	\$8,898
						DSGN	UTILITIES	\$5,762
						DSGN	UTILITIES	\$0
						UNFO	DEMOLITION	\$0

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
NORTHWEST	93-2142	WASHINGTON	72210	UNACCOMPANIED PERSONNEL HOUSING	\$2,185,000	UNFO	EQUIPMENT	\$6,830
						UNFO	HAZ. WASTE	\$110,108
						UNFO	HAZ. WASTE	\$26,894
							Total Mods. (\$)	\$342,709
							Mod. Rate (%)	6.20%
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						CREQ	ELECTRICAL	\$705
						CREQ	FINISHES	\$1,319
						CRIT	ROOF	(\$4,000)
						DSGN	CIVIL	\$2,897
						DSGN	CIVIL	(\$660)
						DSGN	CIVIL	\$2,955
						DSGN	CIVIL	\$4,480
						DSGN	CIVIL	\$1,987
						DSGN	DOOR/WINDOW	\$1,486
						DSGN	DOOR/WINDOW	\$1,631
						DSGN	ELECTRICAL	\$13,559
						DSGN	ELECTRICAL	\$456
						DSGN	ELECTRICAL	\$610
						DSGN	ELECTRICAL	\$1,381
						DSGN	FINISHES	\$1,276
						DSGN	FINISHES	\$6,600
						DSGN	HVAC	\$1,891
						DSGN	HVAC	\$2,614
						DSGN	UTILITIES	\$4,808
						PLAN	ADMIN	\$1,528
						UNFO	CIVIL	\$493
						UNFO	EXT. OVHD	\$2,808
						UNFO	FINISHES	\$301
						UNFO	UTILITIES	\$3,514
							Total Mods. (\$)	\$54,639
							Mod. Rate (%)	2.50%
NORTHWEST	92-3516	WASHINGTON	21420	MAINTENANCE	\$1,146,000	ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						CREQ	ELECTRICAL	\$0
						CREQ	FINISHES	\$3,428
						CREQ	FINISHES	\$968
						CREQ	FINISHES	\$7,453
						CREQ	FINISHES	\$350
						DSGN	CIVIL	(\$6,302)
						DSGN	CIVIL	(\$6,302)
						DSGN	CIVIL	\$879
						DSGN	CIVIL	\$474
						DSGN	CIVIL	\$537
						DSGN	CIVIL	\$1,907
						DSGN	ELECTRICAL	\$4,730
						DSGN	ELECTRICAL	\$1,764
						DSGN	ELECTRICAL	\$765
						DSGN	FINISHES	(\$1,000)
						DSGN	UTILITIES	(\$1,400)
						DSGN	UTILITIES	(\$1,321)
						UNFO	DOOR/WINDOW	\$4,717
						UNFO	ELECTRICAL	\$4,090
						UNFO	FINISHES	\$552
						UNFO	PLUMBING	\$3,633
						UNFO	UTILITIES	\$300
							Total Mods. (\$)	\$20,222
							Mod. Rate (%)	1.76%
NORTHWEST	87-7630	ALASKA	73055	COMMUNITY	\$21,124,000	ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						CREQ	CIVIL	\$15,018
						CREQ	CIVIL	\$19,409
						CREQ	FINISHES	\$37,161
						CREQ	HVAC	\$31,595
						CRIT	ADMIN	\$27,179
						CRIT	CIVIL	\$21,840
						CRIT	CIVIL	(\$43,614)
						CRIT	FINISHES	\$21,805
						CRIT	N/A	\$50,272
						DSGN	CIVIL	\$43,373
						DSGN	CIVIL	\$96,704
						DSGN	CIVIL	\$18,859
						DSGN	ELECTRICAL	\$11,177



EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
NORTHWEST	77-2294	ALASKA	42172	SUPPLY	\$1,496,000	DSGN	ELECTRICAL	\$9,702
						DSGN	HVAC	\$3,123
						DSGN	HVAC	\$13,490
						DSGN	HVAC	\$4,445
						DSGN	N/A	\$2,706
						DSGN	N/A	\$6,844
						DSGN	N/A	\$1,600
						DSGN	N/A	\$880
						DSGN	N/A	\$1,949
						DSGN	N/A	\$2,366
						DSGN	N/A	(\$38,067)
						TIME	TIME	\$0
						UNFO	N/A	\$4,583
						UNFO	N/A	\$15,415
						Total Mods. (\$)		\$379,814
						Mod. Rate (%)		1.80%
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						CREQ	CIVIL	\$29,449
						DSGN	N/A	\$5,200
						UNFO	EARTHWORK	\$2,898
						UNFO	EARTHWORK	\$8,338
						UNFO	EARTHWORK	\$3,826
						UNFO	ELECTRICAL	\$9,909
						UNFO	N/A	\$3,032
						UNFO	N/A	\$2,500
						Total Mods. (\$)		\$65,152
						Mod. Rate (%)		4.36%
NORTHWEST	86-0486	WASHINGTON	13125	OPERATIONAL	\$18,000,000	ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						ADMIN	HVAC	(\$15,189)
						CREQ	CIVIL	\$659
						CREQ	CIVIL	\$2,130
						CREQ	DOOR/WINDOW	(\$720)
						CREQ	ELECTRICAL	\$4,191
						CREQ	ELECTRICAL	\$3,663
						CREQ	ELECTRICAL	\$27,390
						CREQ	ELECTRICAL	(\$3,235)
						CREQ	FINISHES	\$6,047
						CREQ	FINISHES	\$4,897
						CREQ	FINISHES	(\$19,427)
						CREQ	UTILITIES	\$3,586
						CRIT	CIVIL	\$11,798
						CRIT	CIVIL	\$5,647
						CRIT	FINISHES	\$571
						CRIT	HVAC	(\$1,514)
						CRIT	PLUMBING	(\$8,000)
						DSGN	CIVIL	\$827,876
						DSGN	CIVIL	\$1,610
						DSGN	CIVIL	\$769
						DSGN	CIVIL	(\$2,787)
						DSGN	CIVIL	\$6,081
						DSGN	CIVIL	\$29,668
						DSGN	CIVIL	\$1,348
						DSGN	CIVIL	\$16,822
						DSGN	CIVIL	\$2,857
						DSGN	CIVIL	\$4,156
						DSGN	CIVIL	\$1,185
						DSGN	CIVIL	\$1,831
						DSGN	CIVIL	\$7,530
						DSGN	CIVIL	\$3,388
						DSGN	CIVIL	\$5,226
						DSGN	DOOR/WINDOW	\$4,158
						DSGN	DOOR/WINDOW	\$1,719
						DSGN	DOOR/WINDOW	\$1,666
						DSGN	ELECTRICAL	\$3,751
						DSGN	ELECTRICAL	\$2,245
						DSGN	ELECTRICAL	\$3,666
						DSGN	FINISHES	\$4,152
						DSGN	FINISHES	\$736
						DSGN	FINISHES	\$6,810
						DSGN	FINISHES	\$3,398
						DSGN	HVAC	\$51,948
						DSGN	HVAC	\$729
						DSGN	HVAC	\$679

EFD/EFA	Contract #	Project Location	Category Code	Facility Type	Award Amount (\$)	Mod. Reason Code	Mod. Type	Mod. Cost (\$)
NORTHWEST	88-4395	WASHINGTON	81160	UTILITIES IMPROVEMENTS	\$1,578,000	DSGN	HVAC	\$1,796
						DSGN	PLUMBING	\$9,946
						DSGN	PLUMBING	\$5,266
						DSGN	PLUMBING	\$15,000
						DSGN	PLUMBING	\$15,047
						DSGN	ROOFING	\$2,942
						DSGN	ROOFING	\$3,781
						DSGN	UTILITIES	\$7,034
						PLAN	ELECTRICAL	\$166
						UNFO	ELECTRICAL	\$1,875
						UNFO	HAZ. WASTE	\$6,000
						UNFO	HAZ. WASTE	\$10,496
						UNFO	UTILITIES	\$6,399
						Total Mods. (\$)		\$1,101,459
						Mod. Rate (%)		6.12%
NORTHWEST	93-4048	WASHINGTON	93220	SITE IMPROVEMENTS	\$1,845,000	ADMIN	ADMIN	\$0
						ADMIN	ADMIN	\$0
						DSGN	ELECTRICAL	\$5,296
						DSGN	ELECTRICAL	\$1,318
						Total Mods. (\$)		\$6,614
						Mod. Rate (%)		0.42%
						CREQ	FINISHES	\$6,200
						CREQ	N/A	\$11,000
						CREQ	N/A	\$11,000
						CRIT	FINISHES	(\$1,100)
						DSGN	CIVIL	\$27,689
						DSGN	CIVIL	\$21,575
						DSGN	N/A	\$1,277
						DSGN	N/A	\$7,009
						DSGN	UTILITIES	(\$2,775)
						TIME	TIME	\$0
						UNFO	CIVIL	\$25,000
						UNFO	DEMOLITION	\$10,000
						UNFO	EXT. OVHD	\$4,219
						UNFO	FINISHES	\$2,415
						UNFO	N/A	\$5,500
						UNFO	N/A	\$3,165
						UNFO	N/A	\$6,335
						VALUE	EARTHWORK	(\$6,176)
						Total Mods. (\$)		\$132,333
						Mod. Rate (%)		7.17%

## Bibliography

- Broadbuss, J. A. (1991), "Design Effectiveness in Construction: The Relationship Between Inputs to the Design Process and Project Success", Ph.D. Dissertation, University of Texas at Austin, 1991
- Construction Contract Modifications (1994), CTC-343, Naval Facilities Contracts Training Center, Port Hueneme, CA.
- Contracting Manual (1994), NAVFAC P-68, Naval Facilities Engineering Command, Alexandria, VA.
- Department of the Navy Facility Category Codes (1984), NAVFAC P-72, Naval Facilities Engineering Command, Alexandria, VA.
- Doing Business with Naval Facilities Engineering Command (1991), NAVFAC P-303, Naval Facilities Engineering Command, Alexandria, VA.
- NAVFAC Facts (1994), Public Affairs Officer, Naval Facilities Engineering Command, Alexandria, VA.
- Resident Officer in Charge of Construction (ROICC) Manual (1990), Atlantic Division, Naval Facilities Engineering Command, Norfolk, VA.
- Westmoreland, M. K. (1991), "Analysis of Design Changes on Navy Construction Contracts", MS Thesis, University of Texas at Austin, 1991

## Vita

Hector Armando Arellano Jr. was born in El Paso, Texas on September 25, 1964, the son of Yolanda C. Cisneros Arellano and Hector A. Arellano. He graduated from the University of Texas at El Paso, with a Bachelor of Science in Electrical Engineering in May 1987. Shortly after graduation, he was commissioned as an Ensign in the Navy Civil Engineer Corps. He is a Registered Professional Engineer in the State of Texas. He was married to the former Miss Victoria Olvido Alvarez on December 29, 1986, and they have two children Hector Eduardo (4) and Andrea (1). In August, 1994, he entered The graduate School of the University of Texas.

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